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NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 4	Apr 09	ZDB will be removed from STN
NEWS 5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS 6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS 8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS 9	Jun 03	New e-mail delivery for search results now available
NEWS 10	Jun 10	MEDLINE Reload
NEWS 11	Jun 10	PCTFULL has been reloaded
NEWS 12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS 13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS 14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS 15	Jul 30	NETFIRST to be removed from STN
NEWS 16	Aug 08	CANCERLIT reload
NEWS 17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18	Aug 08	NTIS has been reloaded and enhanced
NEWS 19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 23	Sep 03	JAPIO has been reloaded and enhanced
NEWS 24	Sep 16	Experimental properties added to the REGISTRY file
NEWS 25	Sep 16	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 27	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28	Oct 21	EVENTLINE has been reloaded
NEWS 29	Oct 24	BEILSTEIN adds new search fields
NEWS 30	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 31	Oct 25	MEDLINE SDI run of October 8, 2002

NEWS EXPRESS	October 14 CURRENT WINDOWS VERSION IS V6.01, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:47:02 ON 31 OCT 2002

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 15:47:15 ON 31 OCT 2002

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 OCT 2002 HIGHEST RN 468053-85-2
DICTIONARY FILE UPDATES: 30 OCT 2002 HIGHEST RN 468053-85-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

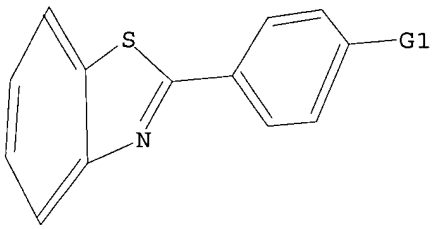
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 935767.str

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



G1 O,S,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 15:47:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 348 TO ITERATE

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100.0% PROCESSED     348 ITERATIONS                          50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          5841 TO     8079
PROJECTED ANSWERS:             3367 TO     5113

L2            50 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 15:47:37 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   7155 TO ITERATE

100.0% PROCESSED    7155 ITERATIONS                        4501 ANSWERS
SEARCH TIME: 00.00.02

L3          4501 SEA SSS FUL L1

=> fil .search
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                             141.42     141.63

FILE 'MEDLINE' ENTERED AT 15:49:27 ON 31 OCT 2002

FILE 'CAPLUS' ENTERED AT 15:49:27 ON 31 OCT 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'BIOSIS' ENTERED AT 15:49:27 ON 31 OCT 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'USPATFULL' ENTERED AT 15:49:27 ON 31 OCT 2002
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EMBASE' ENTERED AT 15:49:27 ON 31 OCT 2002
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=> s l3
   1 FILES SEARCHED...
L4         2387 L3

=> s l4 and (chelat? or ligand?)
L5          111 L4 AND (CHELAT? OR LIGAND?)

=> dup rem l5
PROCESSING COMPLETED FOR L5
L6           100 DUP REM L5 (11 DUPLICATES REMOVED)

=> s l6 and amyloid?
L7           26 L6 AND AMYLOID?

=> dup rem l7
PROCESSING COMPLETED FOR L7
L8            26 DUP REM L7 (0 DUPLICATES REMOVED)

=> d ibib ab hitstr 1-
YOU HAVE REQUESTED DATA FROM 26 ANSWERS - CONTINUE? Y/(N):y
```

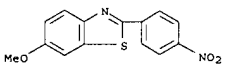
L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:157747 CAPLUS
DOCUMENT NUMBER: 136:200178
TITLE: Preparation of thioflavin derivatives for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of **amyloid** deposition
INVENTOR(S): Klunk, William E.; Mathis, Chester A., Jr.; Wang, Yanming
PATENT ASSIGNEE(S): University of Pittsburgh, USA
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002016333	A2	20020228	WO 2001 US26427	20010824
WO 2002016333	A3	20020530		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001086702	A5	20020304	AU 2001-86702	20010824
US 2002133019	A1	20020919	US 2001-935767	20010824

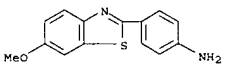
PRIORITY APPLN. INFO.: US 2000 227601P P 20000824
WO 2001-US26427 W 20010824
OTHER SOURCE(S): MARPAT 136:200178

AB This invention relates to novel thioflavin deriva., methods of using the deriva. in, for example, in vivo imaging of patients having neuritic plaques, pharmaceutical compns. comprising the thioflavin derivs. and method of synthesizing the compds. The above **amyloid**-binding thioflavin deriva. are represented by 10 formulas, e.g. benzothiazole deriva. [I, II, and III; Z = S, NR, CR; wherein R = H, lower alkyl, Q (wherein R' = H, lower alkyl); Y = NR1R2, OR2, SR2, Q, Q1 (wherein R' = H, lower alkyl); R1, R2 = H, lower alkyl, (CH2)nOR' (wherein n = 1, 2, or 3; R' = H, lower alkyl), CF3, CH2CH2X, CH2CH2CH2X (wherein X = F, Cl, Br, iodo), COR', Rph, and (CH2)mRph (wherein m = 1, 2, 3, or 4; Rph = an unsubstituted or substituted phenyl); R3 - R14 = H, F, Cl, Br, iodo, lower alkyl, (CH2)nOR' (wherein n = 1, 2, 3), CF3, CH2CH2X, OCH2CH2X, CH2CH2CH2X, OCH2CH2CH2X (wherein X = F, Cl, Br, iodo), cyano, COR', N(R')2, NO2, CON(R')2, O(CO)R', OR', SR', CO2R', Rph, CR':CR'-Rph, C(R')2C(R')2-Rph (wherein Rph = unsubstituted or substituted Ph group; R' = H, lower alkyl group), trialkyltin, **chelating** group]. The compds. find particular use in the diagnosis and treatment of patients having diseases where accumulation of neuritic plaques are prevalent. The above diseases include familial Alzheimer's Disease, Down's Syndrome, and

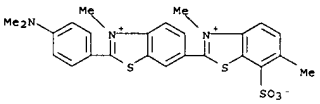
L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 43036-17-5 CAPLUS
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



IT **401813-29-4**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(major component of thioflavin S, tissue staining study by; prepn. of thioflavin deriva. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of **amyloid** deposition)
RN 401813-29-4 CAPLUS
CN 2,6'-Bibenzothiazolium, 2'-[4-(dimethylamino)phenyl]-3,3',6-trimethyl-7-sulfo-, inner salt, chloride (9CI) (CA INDEX NAME)

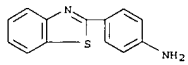


● Cl⁻

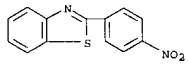
IT **95-22-7P 10205-56-8P**, 2-(4-Dimethylaminophenyl)benzothiazole **10205-71-7P**, 6-Methoxy-2-(4-dimethylaminophenyl)benzothiazole **17200-79-2P 370099-48-2P 401813-34-1P**, 6-Methoxy-2-(4-methylaminophenyl)benzothiazole **401813-35-2P 401813-36-3P 401813-37-4P 401813-38-5P 401813-39-6P**
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of thioflavin deriva. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of **amyloid** deposition)
RN 95-22-7 CAPLUS
CN Benzenamine, 4-(6-methyl[2,6'-bibenzothiazol]-2'-yl)- (9CI) (CA INDEX NAME)

L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)
homozygotes for the apolipoprotein E4 allele. Thus, amidation of 4-nitrobenzoyl chloride with p anisidine in pyridine at room temp. for 16 h gave 4-methoxy-4' nitrobenzanilide which was treated with Lawesson's reagent in chlorobenzene under reflux for 4 h to give 77.4% 4 methoxy-4'-nitrothiobenzanilide. The latter compd. was treated with ethanol/aq. NaOH and added portionwise to aq. potassium ferricyanide at 80-90.degree. with stirring and the refluxed for 0.5 h to give 26% 6 methoxy-2 (4 nitrophenyl)benzothiazole which was reduced by SnCl2.2H2O in boiling ethanol for 4 h to 6-methoxy-2-(4-aminophenyl)benzothiazole (97% yield) and methylated by Me iodide and K2CO3 in DMSO at 100.degree. for 16 h to give 13.3% 6 methoxy 2 (4-methylaminophenyl)benzothiazole (IV) and 40% 6 methoxy-2-(4 methylaminophenyl)benzothiazole (V). Five different 11C-labeled benzothiazole deriva. including IV and V were studied for in vitro .beta. **amyloid** binding property, log P values, and in vivo brain uptake and retention properties in mice. Other studies included in vivo PET imaging expts. using the 11C labeled benzothiazole derivs. in baboons and staining **amyloid** deposits in postmortem Alzheimer's disease and Tg mice.

IT **6278-73-5P**, 2 (4-Aminophenyl)benzothiazole **22868-34-4P**, 2 (4-Nitrophenyl)benzothiazole **43036-14-2P**, 6-Methoxy-2-(4-nitrophenyl)benzothiazole **43036-17-5P**, 6-Methoxy 2 (4 aminophenyl)benzothiazole
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of thioflavin deriva. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of **amyloid** deposition)
RN 6278-73-5 CAPLUS
CN Benzenamine, 4-(2 benzothiazolyl) (9CI) (CA INDEX NAME)

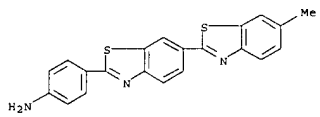


RN 22868-34-4 CAPLUS
CN Benzothiazole, 2 (4-nitrophenyl) (9CI) (CA INDEX NAME)

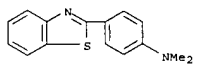


RN 43036-14-2 CAPLUS
CN Benzothiazole, 6-methoxy-2-(4 nitrophenyl)- (9CI) (CA INDEX NAME)

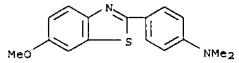
L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)



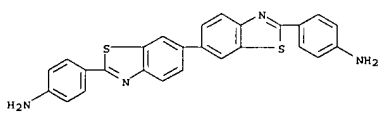
RN 10205-56-8 CAPLUS
CN Benzenamine, 4-(2-benzothiazolyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



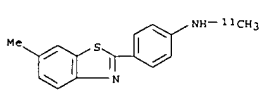
RN 10205-71-7 CAPLUS
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 17200-79-2 CAPLUS
CN Benzenamine, 4,4'-[6,6'-bibenzothiazole]-2,2'-diylbis- (9CI) (CA INDEX NAME)

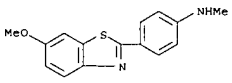


RN 370099-48-2 CAPLUS
CN Benzenamine, N-(methyl 11C)-4 (6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

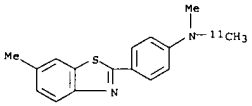


L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)

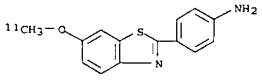
RN 401813-34-1 CAPLUS
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N-methyl- (9CI) (CA INDEX NAME)



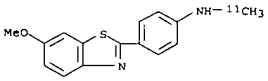
RN 401813-35-2 CAPLUS
CN Benzenamine, N-methyl-N-(methyl-11C)-4-(6-methyl-2-benzothiazolyl) (9CI) (CA INDEX NAME)



RN 401813-36-3 CAPLUS
CN Benzenamine, 4-[6-(methoxy-11C)-2-benzothiazolyl]- (9CI) (CA INDEX NAME)

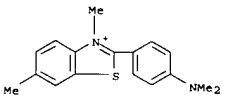


RN 401813-37-4 CAPLUS
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N-(methyl-11C)- (9CI) (CA INDEX NAME)



RN 401813-38-5 CAPLUS
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N-methyl-N-(methyl-11C)- (9CI)
(CA INDEX NAME)

L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)



● Cl⁻

RN 2390-54-7 CAPLUS
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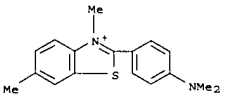
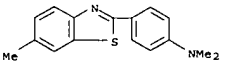
(CA INDEX NAME)

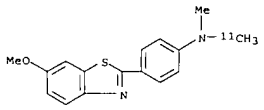


● Cl⁻

RN 10205-62-6 CAPLUS
CN Benzenamine, N,N-dimethyl-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



L8 ANSWER 1 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 401813-39-6 CAPLUS
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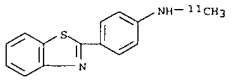
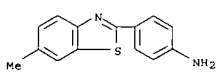


IT **92-36-4**, 2-(4-Aminophenyl)-6-methylbenzothiazole **2390-54-7**, Thioflavin T **2390-54-7D**, Thioflavin T, 14C-labeled **10205-62-6**, 2-(4-Dimethylaminophenyl)-6-methylbenzothiazole
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tissue staining study; prepn. of thioflavin derivs. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of **amyloid** deposition)
RN 92-36-4 CAPLUS
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)

L8 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2002 ACS

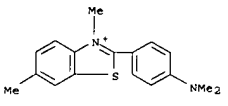
ACCESSION NUMBER: 2002:142739 CAPLUS
DOCUMENT NUMBER: 136:196592
TITLE: Methods and uses of .alpha.7 nicotinic receptor peptides as **ligands** for .beta. **amyloid** peptides
INVENTOR(S): Lee, Daniel H. S.; Reitz, Allen B.; Plata-Salaman, Carlos; Wang, Hoau-Yan
PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002014351	A2	20020221	WO 2001-US25410	20010814
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001081268	A5	20020225	AU 2001-81268	20010814

PRIORITY APPLN. INFO.: US 2000-225048P P 20000814
WO 2001-US25410 W 20010814

AB The present invention describes native and degenerate peptides derived from human .alpha.7 nicotinic receptor useful as minimized **ligands** for .beta. **amyloid** peptides. These peptides are useful to discover compds. that inhibit the interaction with .beta. **amyloid** peptides with the .alpha.7 nicotinic receptor, and are also useful in assays to measure .beta. **amyloid**.

IT **2390-54-7**, Thioflavin T
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(methods and uses of .alpha.7 nicotinic receptor peptides as **ligands** for .beta. **amyloid** peptides)
RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)



● Cl⁻

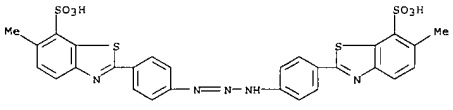
L8 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)

L8 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:89879 CAPLUS
DOCUMENT NUMBER: 136:139864
TITLE: **Amyloid** targeting imaging agents
INVENTOR(S): Gervais, Francine; Kong, Xianqi; Chalifour, Robert; Migneault, David
PATENT ASSIGNEE(S): Neurochem Inc., Can.
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002007781	A2	20020131	WO 2001-CA1071	20010725
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002115717	A1	20020822	US 2001-915092	20010724

PRIORITY APPLN. INFO.: US 2000-220808P P 20000725
US 2001-915092 A 20010724
OTHER SOURCE(S): MARPAT 136:139864
AB **Amyloid**-targeting imaging agents such as radiolabeled **amyloid** targeting mols. and **amyloid** targeting mol.-**chelator** conjugates for imaging, e.g., **amyloid** plaques in vivo, and/or for the treatment of **amyloidosis** disorders are described. The invention provides **amyloid**-targeting imaging agents that are useful for imaging sites of **amyloid** disease. The imaging agents are capable of binding specifically to **amyloid** plaques, as an aid in diagnosis and/or early treatment of **amyloidosis** disorders.
IT **1829-00-1D**, Thiazol yellow g, radiolabeled conjugates
2390-54-7D, Thioflavin t, radiolabeled conjugates
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**amyloid** targeting imaging agents)
RN 1829-00-1 CAPLUS
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L8 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)



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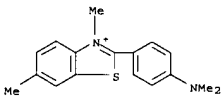
RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)



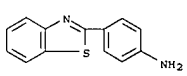
● Cl⁻

L8 ANSWER 4 OF 26 USPATFULL
ACCESSION NUMBER: 2002:243825 USPATFULL
TITLE: Thioflavin derivatives for use in antemortem diagnosis of alzheimer's disease and vivo imaging and prevention of **amyloid** deposition
INVENTOR(S): Klunk, William E., Pittsburgh, PA, UNITED STATES
Mathis, Chester A., JR., Pittsburgh, PA, UNITED STATES
Wang, Yanming, Imperial, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002133019	A1	20020919
APPLICATION INFO.:	US 2001-935767	A1	20010824 (9)

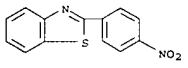
	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-227601P	20000824 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Stephen A. Bent, FOLEY & LARDNER, Washington Harbour, 3000 K Street, N.W., Suite 500, Washington, DC, 20007-5109
NUMBER OF CLAIMS: 43
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1956
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to novel thioflavin derivatives, methods of using the derivatives in, for example, in vivo imaging of patients having neuritic plaques, pharmaceutical compositions comprising the thioflavin derivatives and method of synthesizing the compounds. The compounds find particular use in the diagnosis and treatment of patients having diseases where accumulation of neuritic plaques are prevalent. The disease states or maladies include but are not limited to Alzheimer's Disease, familial Alzheimer's Disease, Down's Syndrome and homozygotes for the apolipoprotein E4 allele.
IT **6278-73-5P**, 2-(4-Aminophenyl)benzothiazole **22868-34-4P**, 2-(4-Nitrophenyl)benzothiazole **43036-14-2P**, 6-Methoxy-2-(4-nitrophenyl)benzothiazole **43036-17-5P**, 6-Methoxy-2-(4-aminophenyl)benzothiazole
(intermediate; prepn. of thioflavin derivs. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of amyloid deposition)
RN 6278-73-5 USPATFULL
CN Benzenamine, 4-(2-benzothiazolyl)- (9CI) (CA INDEX NAME)

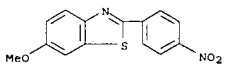


RN 22868-34-4 USPATFULL
CN Benzothiazole, 2-(4-nitrophenyl)- (9CI) (CA INDEX NAME)

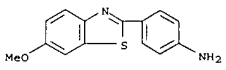
L8 ANSWER 4 OF 26 USPATFULL (Continued)



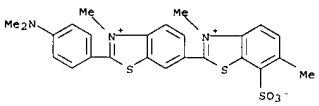
RN 43036-14-2 USPATFULL
CN Benzothiazole, 6-methoxy 2-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



RN 43036-17-5 USPATFULL
CN Benzenamine, 4-(6-methoxy 2-benzothiazolyl)- (9CI) (CA INDEX NAME)



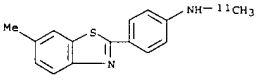
IT **401813-29-4**
(major component of thioflavin S, tissue staining study by; prepn. of thioflavin deriva. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of amyloid deposition)
RN 401813-29-4 USPATFULL
CN 2,6'-Bibenzothiazolium, 2'-[4-(dimethylamino)phenyl]-3,3',6-trimethyl-7-sulfo-, inner salt, chloride (9CI) (CA INDEX NAME)



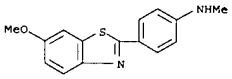
● Cl⁻

IT **95-22-7P 10205-56-8P**, 2-(4-Dimethylaminophenyl)benzothiazole **10205-71-7P**, 6-Methoxy-2-(4-dimethylaminophenyl)benzothiazole **17200-79-2P 370099-48-2P 401813-34-1P**, 6-Methoxy-2-(4-methylaminophenyl)benzothiazole **401813-35-2P 401813-36-3P 401813-37-4P 401813-38-5P 401813-39-6P**

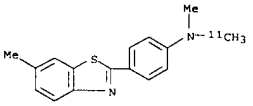
L8 ANSWER 4 OF 26 USPATFULL (Continued)
CN Benzenamine, N-(methyl-11C)-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



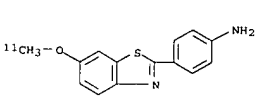
RN 401813-34-1 USPATFULL
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N-methyl- (9CI) (CA INDEX NAME)



RN 401813-35-2 USPATFULL
CN Benzenamine, N-methyl-N-(methyl-11C)-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

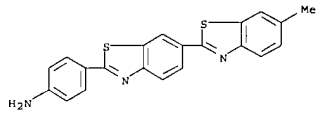


RN 401813-36-3 USPATFULL
CN Benzenamine, 4-[6-(methoxy-11C)-2-benzothiazolyl]- (9CI) (CA INDEX NAME)

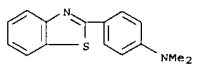


RN 401813-37-4 USPATFULL
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N-(methyl-11C)- (9CI) (CA INDEX NAME)

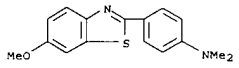
L8 ANSWER 4 OF 26 USPATFULL (Continued)
(prepn. of thioflavin deriva. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of amyloid deposition)
RN 95-22-7 USPATFULL
CN Benzenamine, 4-(6-methyl[2,6'-bibenzothiazol]-2'-yl)- (9CI) (CA INDEX NAME)



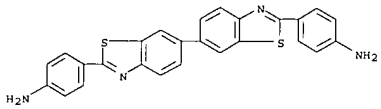
RN 10205-56-8 USPATFULL
CN Benzenamine, 4-(2-benzothiazolyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 10205-71-7 USPATFULL
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

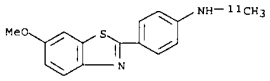


RN 17200-79-2 USPATFULL
CN Benzenamine, 4,4'-[6,6'-bibenzothiazole]-2,2'-diylbis- (9CI) (CA INDEX NAME)

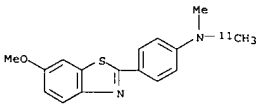


RN 370099-48-2 USPATFULL

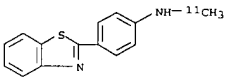
L8 ANSWER 4 OF 26 USPATFULL (Continued)



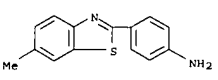
RN 401813-38-5 USPATFULL
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)-N-methyl-N-(methyl-11C)- (9CI) (CA INDEX NAME)



RN 401813-39-6 USPATFULL
CN Benzenamine, 4-(2-benzothiazolyl)-N-(methyl-11C)- (9CI) (CA INDEX NAME)

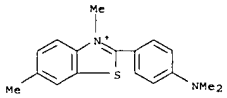


IT **92-36-4**, 2-(4-Aminophenyl)-6-methylbenzothiazole **2390-54-7**, Thioflavin T **2390-54-7D**, Thioflavin T, 14C-labeled **10205-62-6**, 2-(4-Dimethylaminophenyl)-6-methylbenzothiazole
(tissue staining study; prepn. of thioflavin deriva. for use in antemortem diagnosis of Alzheimer's disease and in vivo imaging and prevention of amyloid deposition)
RN 92-36-4 USPATFULL
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)

L8 ANSWER 4 OF 26 USPATFULL (Continued)



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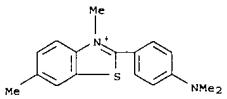
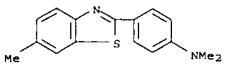
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2 [4-(dimethylamino)phenyl]-3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)

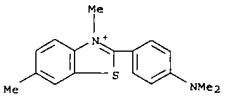


● Cl⁻

RN 10205-62-6 USPATFULL
CN Benzenamine, N,N-dimethyl 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



L8 ANSWER 5 OF 26 USPATFULL (Continued)
(CA INDEX NAME)



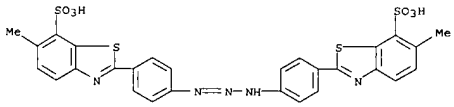
● Cl⁻

L8 ANSWER 5 OF 26 USPATFULL
ACCESSION NUMBER: 2002:214328 USPATFULL
TITLE: **Amyloid** targeting imaging agents and uses thereof
INVENTOR(S): Gervais, Francine, Ile Bizard, CANADA
Kong, Xianqi, Dollard-des-Ormeaux, CANADA
Chalifour, Robert, Ile Bizard, CANADA
Migneault, David, Laval, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002115717	A1	20020822
APPLICATION INFO.:	US 2001 915092	A1	20010724 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-220808P	20000725 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
NUMBER OF CLAIMS: 56
EXEMPLARY CLAIM: 1
LINE COUNT: 2210
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB **Amyloid**-targeting imaging agents such as radiolabeled **amyloid** targeting molecules and **amyloid** targeting molecule-**chelator** conjugates for imaging, e.g., **amyloid** plaques in vivo, and/or for the treatment of **amyloidosis** disorders. The invention provides **amyloid** -targeting imaging agents that are useful for imaging sites of **amyloid** disease. Imaging agents of the invention are capable of binding specifically to **amyloid** plaques, as an aid in diagnosis and/or early treatment of **amyloidosis** disorders.
IT **1829-00-1D**, Thiazol yellow g, radiolabeled conjugates
2390-54-7D, Thioflavin t, radiolabeled conjugates
(amyloid targeting imaging agents)
RN 1829 00-1 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)



● 2 Na

RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)

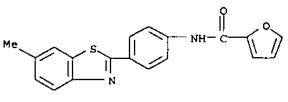
L8 ANSWER 6 OF 26 USPATFULL
ACCESSION NUMBER: 2002:37902 USPATFULL
TITLE: Thiazole, imidazole and oxazole compounds and treatments of disorders associated with protein aging
INVENTOR(S): Wagle, Dilip, New York, NY, UNITED STATES
Vasan, Sara, New York, NY, UNITED STATES
Egan, John J., New York, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002022622	A1	20020221
APPLICATION INFO.:	US 2001-766547	A1	20010119 (9)

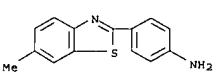
	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-176995P	20000119 (60)
	US 2000-183274P	20000217 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DECHERT, P. O. Box 5218, Princeton, NJ, 08543
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
LINE COUNT: 2507
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are, among other things, compounds of formula I or IA, ##STR1##

. Also provided are methods of treatment with such compounds.
IT **289491-05-0P**
(prepn. of thiazole, imidazole, and oxazole compds. for treatment of disorders assocd. with protein aging)
RN 289491-05-0 USPATFULL
CN 2-Furancarboxamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



IT **92-36-4**, 2-(4-Aminophenyl)-6-methylbenzothiazole
(prepn. of thiazole, imidazole, and oxazole compds. for treatment of disorders assocd. with protein aging)
RN 92-36-4 USPATFULL
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



L8 ANSWER 7 OF 26 USPATFULL
ACCESSION NUMBER: 2002:152685 USPATFULL
TITLE: Compositions and methods for advanced glycosylation endproduct mediated modulation of **amyloidosis**
INVENTOR(S): Vitek, Michael P., 205 Park Knoll La., Apex, NC, United States 27502
Cerami, Anthony, Ram Island Dr., Shelter Island, NY, United States 11964
Bucala, Richard J., 504 E. 63rd St. Apt. 33 0, New York, NY, United States 10021
Ulrich, Peter C., 148 DeWolf Rd., Old Tappan, NJ, United States 07675
Vlassara, Helen, Ram Island Dr., Shelter Island, NY, United States 11964
Zhang, Xini, 150 Fairhaven Dr. Apt. D1, Jericho, NY, United States 11753(4)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6410598	B1	20020625
APPLICATION INFO.:	US 1995-477364		19950607 (8)

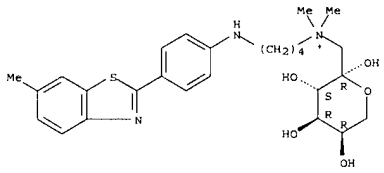
RELATED APPLN. INFO.: Continuation-in part of Ser. No. US 1995 457169, filed on 1 Jun 1995 Continuation in part of Ser. No. WO 1995 US1380, filed on 2 Feb 1995 Continuation in part of Ser. No. US 1994-311768, filed on 23 Sep 1994, now abandoned Continuation of Ser. No. US 1994 191579, filed on 3 Feb 1994, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Duffy, Patricia A.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 2202
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to the non enzymatic glycosylation of **amyloidogenic** proteins and the consequent formation of advanced glycosylation endproducts (AGEs). It has been found that formation of AGE-**amyloidogenic** proteins can enhance **amyloidosis**. The invention further relates to compositions and methods for the prevention and treatment of **amyloidosis** associated with **amyloid** diseases, particularly neurodegenerative disease and Type II diabetes, and more particularly Alzheimer's disease. In a specific example, aggregation of an **amyloidogenic** peptide, .beta.AP, is enhanced by the glycosylation reaction of .beta.AP to form AGE-.beta.AP as defined herein. Accordingly, the invention extends to a method for modulating the in vivo aggregation of **amyloid** polypeptides and associated **amyloidosis** by controlling the formation and presence of AGE **amyloid** polypeptide. A corresponding diagnostic utility comprises the measurement of the course and extent of **amyloidosis** by a measurement of the presence and amount of AGEs and particularly, AGE-**amyloid**. An assay is included that may use the AGE-**amyloid** polypeptide of the present invention to identify disease states characterized by the presence of AGE **amyloid**. Additionally, such an assay can be utilized to monitor

L8 ANSWER 7 OF 26 USPATFULL (Continued)
therapy and thus adjust a dosage regimen for a given disease state characterized by the presence of AGE **amyloid**.

IT **169553-21-3P**
(advanced glycosylation endproduct mediated modulation of amyloidosis)
RN 169553 21 3 USPATFULL
CN .beta. D Fructopyranose, 1 deoxy 1 [dimethyl[4 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino]butyl]ammonio] , chloride (9CI) (CA INDEX NAME)

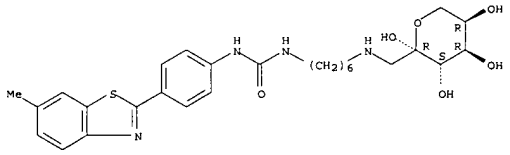
Absolute stereochemistry.



● Cl⁻

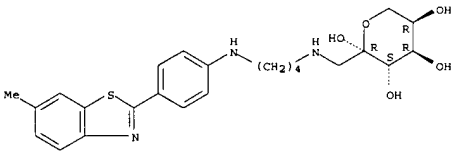
IT **169553-15-5P 169553-19-9P**
(advanced glycosylation endproduct mediated modulation of amyloidosis)
RN 169553 15 5 USPATFULL
CN .beta. D Fructopyranose, 1 deoxy 1 [[6 [[[[4 (6 methyl 2 benzothiazolyl)phenyl]amino]carbonyl]amino]hexyl]amino] (9CI) (CA INDEX NAME)

Absolute stereochemistry.



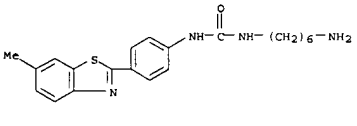
RN 169553-19-9 USPATFULL
CN .beta. D Fructopyranose, 1-deoxy-1 [[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]amino] , monohydrochloride (9CI) (CA INDEX NAME)

L8 ANSWER 7 OF 26 USPATFULL (Continued)
Absolute stereochemistry.



● HCl

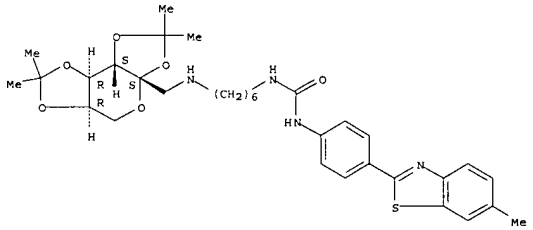
IT **169553-13-3P 169553-14-4P 169553-16-6P 169553-18-8P 169553-20-2P 438457-78-4P**
(prepn. and reaction; advanced glycosylation endproduct-mediated modulation of amyloidosis)
RN 169553-13-3 USPATFULL
CN Urea, N-(6-aminohexyl) N'-[4-(6-methyl-2-benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



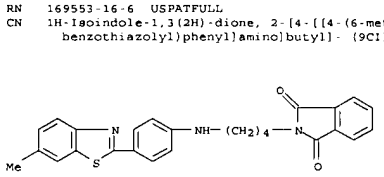
RN 169553 14 4 USPATFULL
CN .beta. D Fructopyranose, 1-deoxy-1-[[6 [[[[4 (6-methyl-2 benzothiazolyl)phenyl]amino]carbonyl]amino]hexyl]amino] 2,3:4,5 bis O (1 methylethylidene) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L8 ANSWER 7 OF 26 USPATFULL (Continued)

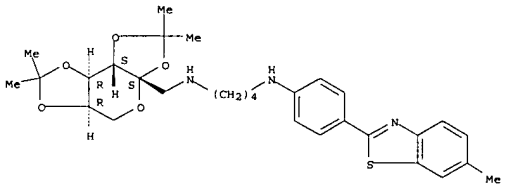


RN 169553-16-6 USPATFULL
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl] (9CI) (CA INDEX NAME)



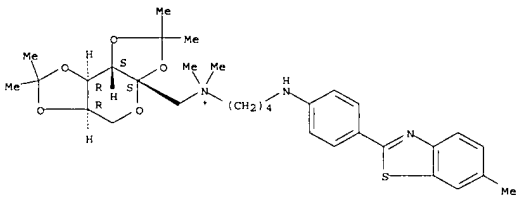
RN 169553-18-8 USPATFULL
CN .beta. D Fructopyranose, 1 deoxy-1-[[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]amino] 2,3:4,5-bis-O-(1-methylethylidene) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 169553-20-2 USPATFULL
CN .beta. D Fructopyranose, 1-deoxy-1-[dimethyl[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]ammonio] 2,3:4,5 bis-O-(1-methylethylidene) , iodide (9CI) (CA INDEX NAME)

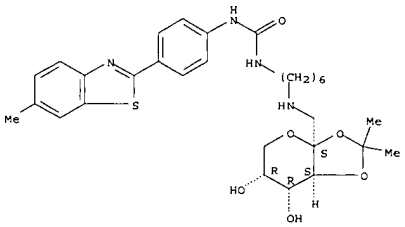
L8 ANSWER 7 OF 26 USPATFULL (Continued)
Absolute stereochemistry.



● I⁻

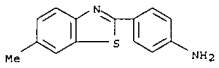
RN 438457-78-4 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[6-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]hexyl]amino]-2,3-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

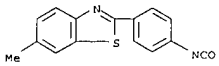


IT **92-36-4 67229-93-0**
(reaction; advanced glycosylation endproduct-mediated modulation of amyloidosis)
RN 92-36-4 USPATFULL
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

L8 ANSWER 7 OF 26 USPATFULL (Continued)



RN 67229-93-0 USPATFULL
CN Benzothiazole, 2-(4-isocyanatophenyl)-6-methyl- (9CI) (CA INDEX NAME)



L8 ANSWER 8 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2002353985 EMBASE
TITLE: Pathological peptide folding in Alzheimer's disease and other conformational disorders.
AUTHOR: Mager P.P.; Penke B.; Walter R.; Harkany T.; Hartig W.
CORPORATE SOURCE: P.P. Mager, Research Group of Pharmacochemistry, Institute of Pharmacology/Toxicology, University of Leipzig, Hartelstr. 16-18, D-04107 Leipzig Saxony, Germany. magp@medizin.uni-leipzig.de
SOURCE: Current Medicinal Chemistry, (2002) 9/19 (1763-1780). Refs: 200
ISSN: 0929-8673 CODEN: CMCHE7
COUNTRY: Netherlands
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Main neuropathological hallmarks of Alzheimer's disease (AD) and other neurodegenerative disorders are the deposition of neurofibrillary tangles consisting of abnormally phosphorylated protein tau and of senile plaques largely containing insoluble .beta.-**amyloid** peptides (A.beta.), containing up to 43 amino acid residues derived from the .beta.-**amyloid** precursor protein. Such A.beta.-sheets become visible by using suitable histochemical methods. Molecular simulation showed that the central, .alpha.-helical, lipophilic, antigenic folding domain of the A.beta.-peptide loop is a promising molecular target of .beta.-sheet breakers that thus prevent the polymerization of A.beta. into aggregates. It seems that di- and tetramers of A.beta.-peptides have a .beta.-barrel-like structure. In the present review, an optimized neural network analysis was applied to recognize possible structure-activity relationships of peptidomimetic .beta.-sheet breakers. The anti aggregatory potency of .beta.-sheet breakers largely depends upon their total, electrostatic, and hydration energy as derived from their geometry-optimized conformations using the hybrid Gasteiger-molecular mechanics approach. Moreover, we also summarize peptide misfolding in several disorders with distinct clinical symptoms, including prion diseases and a broad variety of systemic **amyloidoses**, as the common pathogenic step driving these disorders. In particular, conversion of nontoxic .alpha.-helix/random-coils to .beta.-sheet conformation was recognized as being critical in producing highly pathogenic peptide assemblies. Whereas conventional pharmacotherapy of AD is mainly focused on restoring cholinergic activity and diminishing inflammatory responses as a consequence of **amyloid** accumulation, we here survey potential approaches aimed at preventing or reserving the transition of neurotoxic peptide species from .alpha.-helical/random coil to .beta.-sheet conformation and thus abrogating their effects in a broad variety of disorders.

L8 ANSWER 9 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2002098419 EMBASE
TITLE: Aggregation of .alpha.-synuclein induced by the Cu,Zn-superoxide dismutase and hydrogen peroxide system.
AUTHOR: Kyung S.K.; Soo Y.C.; Hyeok Y.K.; Moo H.W.; Tae-Cheon K.; Jung H.K.
CORPORATE SOURCE: H.K. Jung, Chongju University, Division of Natural Sciences, Department of Genetic Engineering, Chongju 360-764, Korea, Republic of. jhkang@chongju.ac.kr
SOURCE: Free Radical Biology and Medicine, (15 Mar 2002) 32/6 (544-550). Refs: 50
ISSN: 0891-5849 CODEN: FRBMEH
PUBLISHER IDENT.: S 0891-5849(02)00741-4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Alpha-synuclein is a major component of the abnormal protein aggregation in Lewy bodies of Parkinson's disease (PD) and senile plaques of Alzheimer's disease (AD). Previous studies have shown that the aggregation of .alpha.-synuclein was induced by copper (II) and H(2)O(2) system. Since copper ions could be released from oxidatively damaged Cu,Zn-superoxide dismutase (SOD), we investigated the role of Cu,Zn-SOD in the aggregation of .alpha.-synuclein. When .alpha.-synuclein was incubated with both Cu,Zn-SOD and H(2)O(2), .alpha.-synuclein was induced to be aggregated. This process was inhibited by radical scavengers and spin trapping agents such as 5,5'-dimethyl 1-pyrolline N-oxide and tert-butyl-.alpha.-phenylnitrone. Copper **chelators**, diethyldithiocarbamate and penicillamine, also inhibited the Cu,Zn-SOD/H(2)O(2) system-induced .alpha.-synuclein aggregation. These results suggest that the aggregation of .alpha.-synuclein is mediated by the Cu,Zn-SOD/H(2)O(2) system via the generation of hydroxyl radical by the free radical-generating function of the enzyme. The Cu,Zn-SOD/H(2)O(2)-induced .alpha.-synuclein aggregates displayed strong thioflavin-S reactivity, reminiscent of **amyloid**. These results suggest that the Cu,Zn-SOD/H(2)O(2) system might be related to abnormal aggregation of .alpha.-synuclein, which may be involved in the pathogenesis of PD and related disorders. .COPYRGT. 2002 Elsevier Science Inc.

L8 ANSWER 10 OF 26 MEDLINE
ACCESSION NUMBER: 2001376260 MEDLINE
DOCUMENT NUMBER: 21316499 PubMed ID: 11313335
TITLE: Thioflavin T is a fluorescent probe of the acetylcholinesterase peripheral site that reveals conformational interactions between the peripheral and acylation sites.
AUTHOR: De Ferrari G V; Mallender W D; Inestrosa N C; Rosenberry T L
CORPORATE SOURCE: Department of Pharmacology and Program in Neurosciences, Mayo Foundation for Medical Education and Research, Mayo Clinic Jacksonville, Jacksonville, Florida 32224, USA.
CONTRACT NUMBER: NS-16577 (NINDS)
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2001 Jun 29) 276 (26) 23282-7.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200108
ENTRY DATE: Entered STN: 20010820
Last Updated on STN: 20010820
Entered Medline: 20010816

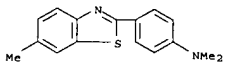
AB Three-dimensional structures of acetylcholinesterase (AChE) reveal a narrow and deep active site gorge with two sites of **ligand** binding, an acylation site at the base of the gorge, and a peripheral site near the gorge entrance. Recent studies have shown that the peripheral site contributes to catalytic efficiency by transiently binding substrates on their way to the acylation site, but the question of whether the peripheral site makes other contributions to the catalytic process remains open. A possible role for **ligand** binding to the peripheral site that has long been considered is the initiation of a conformational change that is transmitted allosterically to the acylation site to alter catalysis. However, evidence for conformational interactions between these sites has been difficult to obtain. Here we report that thioflavin T, a fluorophore widely used to detect **amyloid** structure in proteins, binds selectively to the AChE peripheral site with an equilibrium dissociation constant of 1.0 microm. The fluorescence of the bound thioflavin T is increased more than 1000-fold over that of unbound thioflavin T, the greatest enhancement of fluorescence for the binding of a fluorophore to AChE yet observed. Furthermore, when the acylation site **ligands** edrophonium or m-(N, N,N-trimethylammonio)trifluoroacetoph enone form ternary complexes with AChE and thioflavin T, the fluorescence is quenched by factors of 2.7-4.2. The observation of this partial quenching of thioflavin T fluorescence is a major advance in the study of AChE for two reasons. First, it allows thioflavin T to be used as a reporter for **ligand** reactions at the acylation site. Second, it indicates that **ligand** binding to the acylation site initiates a change in the local AChE conformation at the peripheral site that quenches the fluorescence of bound thioflavin T. The data provide strong evidence in support of a conformational interaction between the two AChE sites.

L8 ANSWER 11 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:843336 CAPLUS
DOCUMENT NUMBER: 136:115023
TITLE: Novel stilbenes as probes for **amyloid** plaques
AUTHOR(S): Kung, Hank F.; Lee, Chi-Wan; Zhuang, Zhi-Ping; Kung, Mei-Ping; Hou, Catherine; Ploessl, Karl
CORPORATE SOURCE: Departments of Radiology and Pharmacology, University of Pennsylvania, Philadelphia, PA, 19104, USA
SOURCE: Journal of the American Chemical Society (2001), 123(50), 12740-12741
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Alzheimer's disease (AD) is a neurodegenerative disease of the brain characterized by dementia, cognitive impairment, and memory loss. Formation and accumulation of aggregates of .beta.-**amyloid** (A.beta.) peptides in the brain are crit. factors in the development and progression of AD. The fibrillar aggregates of **amyloid** peptides, A.beta.1-40 and A.beta.1-42, are major metabolic peptides derived from **amyloid** precursor protein found in senile plaques and cerebrovascular **amyloid** deposits in AD patients. Our lab. has reported two types of iodinated probes, styrylbenzenes (IMSB) and thioflavins (benzothiazole, TZDM), for binding to A.beta. aggregates. In vitro binding studies of these **ligands** showed excellent binding affinities with Kd values of 0.13 and 0.06 nM for aggregates of A.beta.1-40 and 0.73 and 0.14 nM for aggregates of A.beta.1-42, resp. More importantly, under a competitive-binding assaying condition, two different and distinctive binding sites on A.beta.1-40 and A.beta.1-42 aggregates, which are mutually exclusive, were obsd. for styrylbenzenes (SB) and thioflavins (benzothiazole, TZ). Significantly, (125I)TZDM crossed intact blood-brain barrier and localized in the brain of normal mice after an i.v. injection. For in vivo imaging of A.beta. aggregates to succeed, it will be necessary to develop agents which show good brain uptake in vivo. Brain penetration, a key factor for consideration, is usually related to the mol. size, neutrality, and lipophilicity. Further refinements of these probes are necessary to improve the brain uptake and washout from the normal brain regions and to achieve a high retention in the regions rich in A.beta. plaques.

IT **10205-62-6**
RL: DGN (Diagnostic use); BIOL (Biological study); USES (Uses)
(stilbenes as probes for **amyloid** plaques)

RN 10205-62-6 CAPLUS
CN Benzenamine, N,N-dimethyl-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2001:439765 BIOSIS
DOCUMENT NUMBER: PREV200100439765
TITLE: Amphoterin includes a sequence motif which is homologous to the Alzheimer's beta-**amyloid** peptide (Abeta), forms **amyloid** fibrils in vitro, and binds avidly to Abeta.
AUTHOR(S): Kallijarvi, Jukka; Haltia, Matti; Baumann, Marc H. (1)
CORPORATE SOURCE: (1) Protein Chemistry Unit, Institute of Biomedicine, Biomedicum Helsinki, University of Helsinki, FIN-00014, Helsinki: Marc.Baumann@helsinki.fi Finland
SOURCE: Biochemistry, (August 28, 2001) Vol. 40, No. 34, pp. 10032-10037. print.
ISSN: 0006-2960.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English

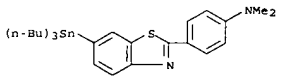
AB Many of the proteins associated with **amyloidoses** have been found to share structural and sequence similarities, which are believed to be responsible for their capability to form **amyloid** fibrils. Interestingly, some proteins seem to be able to form **amyloid** -like fibrils although they are not associated with **amyloidoses**. This indicates that the ability to form **amyloid** fibrils may be a general property of a greater number of proteins not associated with these diseases. In the present work, we have searched for **amyloidogenic** consensus sequences in two current protein/peptide databases and show that many proteins share structures which can be predicted to form **amyloid**. One of these potentially **amyloidogenic** proteins is amphoterin (also known as HMG-1), involved in neuronal development and a **ligand** for the receptor for advanced glycation end products (RAGE). It contains an **amyloidogenic** peptide fragment which is highly homologous to the Alzheimer's **amyloid** beta-peptide. If enzymatically released from the native protein, it forms **amyloid** -like fibrils which are visible in electron microscopy, exhibit apple green birefringence under polarized light after Congo red staining, and increases thioflavin T fluorescence. This fragment also shows high affinity to Abeta as a free peptide or while part of the native protein. Our results support the hypothesis that the potential to form **amyloid** is a common characteristic of a number of proteins, independent of their relation to **amyloidoses**, and that this potential can be predicted based on the physicochemical properties of these proteins.

L8 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:315921 CAPLUS
DOCUMENT NUMBER: 135:73471
TITLE: Radioiodinated Styrylbenzenes and Thioflavins as Probes for **Amyloid** Aggregates
AUTHOR(S): Zhuang, Z.-P.; Kung, M. P.; Hou, C.; Skovronsky, D. M.; Gur, T. L.; Ploessl, K.; Trojanowski, J. Q.; Lee, V. M. Y.; Kung, H. F.
CORPORATE SOURCE: Departments of Radiology Pathology and Laboratory Medicine and Pharmacology, University of Pennsylvania, Philadelphia, PA, 19104, USA
SOURCE: Journal of Medicinal Chemistry (2001), 44(12), 1905-1914
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We report for the first time that small mol.-based radioiodinated **ligands**, showing selective binding to A.beta. aggregates, cross the intact blood-brain barrier by simple diffusion. Four novel **ligands** showing preferential labeling of **amyloid** aggregates of A.beta.(1 40) and A.beta.(1 42) peptides, commonly assocd. with plaques in the brain of people with Alzheimer's disease (AD), were developed. Two 125I labeled styrylbenzenes, (E,E) 1-iodo 2,5-bis(3 hydroxycarbonyl-4-hydroxy)styrylbenzene, I (ISB), and (E,E)-1-iodo 2,5 bis(3-hydroxycarbonyl 4-methoxy)styrylbenzene, II (IMSB), and two 125I-labeled thioflavins, 2-[4'-(dimethylamino)phenyl] 6-iodobenzothiazole, III (TZDM), and 2 [4'-(4''-methylpiperazin-1-yl)phenyl]-6-iodobenzothiazole, IV (TZPI), were prepd. at a high specific activity (2200 Ci/mmol). In vitro binding studies of these **ligands** showed excellent binding affinities with Kd values of 0.08, 0.13, 0.06, and 0.13 nM for aggregates of A.beta.(1-40) and 0.15, 0.73, 0.14, and 0.15 nM for aggregates of A.beta.(1-42), resp. Interestingly, under a competitive-binding assaying condition, different binding sites on A.beta.(1-40) and A.beta.(1-42) aggregates, which are mutually exclusive, were obsd. for styrylbenzenes and thioflavins. Autoradiog. studies of postmortem brain sections of a patient with Down's syndrome known to contain primarily A.beta.(1-42) aggregates in the brain showed that both [125I] III and [125I]-IV labeled these brain sections, but [125I]-II, selective for A.beta.(1-40) aggregates, exhibited very low labeling of the comparable brain section. Biodistribution studies in normal mice after an iv injection showed that [125I]-III and [125I]-IV exhibited excellent brain uptake and retention, the levels of which were much higher than those of [125I]-I and [125I]-II. These findings strongly suggest that the new radioiodinated **ligands** may be useful as biomarkers for studying A.beta.(1-40) as well as A.beta.(1-42) aggregates of **amyloidogenesis** in AD patients.

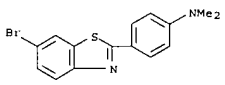
IT **346691-88-1P**
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

L8 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 346691-92-7 CAPLUS
CN Benzenamine, N,N-dimethyl-4-[6-(tributylstannyl)-2-benzothiazolyl] (9CI) (CA INDEX NAME)

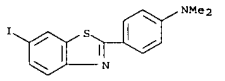


REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

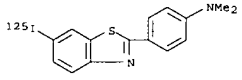
L8 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)
(prepn. of radioiodinated styrylbenzenes and thioflavins for **amyloid** aggregate imaging)
RN 346691 88 1 CAPLUS
CN Benzenamine, 4 (6 bromo 2-benzothiazolyl) N,N dimethyl (9CI) (CA INDEX NAME)



IT **346691-94-9P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(prepn. of radioiodinated styrylbenzenes and thioflavins for **amyloid** aggregate imaging)
RN 346691-94-9 CAPLUS
CN Benzenamine, 4-(6-iodo 2-benzothiazolyl) N,N dimethyl (9CI) (CA INDEX NAME)



IT **346691-96-1P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(prepn. of radioiodinated styrylbenzenes and thioflavins for **amyloid** aggregate imaging)
RN 346691-96-1 CAPLUS
CN Benzenamine, 4-[6-(iodo-125I)-2-benzothiazolyl] N,N-dimethyl- (9CI) (CA INDEX NAME)



IT **346691-92-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of radioiodinated styrylbenzenes and thioflavins for **amyloid** aggregate imaging)

L8 ANSWER 14 OF 26 MEDLINE
ACCESSION NUMBER: 2001365964 MEDLINE
DOCUMENT NUMBER: 21306236 PubMed ID: 11413227
TITLE: The relationship between the aggregational state of the **amyloid**-beta peptides and free radical generation by the peptides.
AUTHOR: Monji A; Utsumi H; Ueda T; Imoto T; Yoshida I; Hashioka S; Tashiro K; Tashiro N
CORPORATE SOURCE: Department of Neuropsychiatry, Graduate School of Medical Sciences, Graduate School of Pharmaceutical Sciences, Kyushu University, Fukuoka, Japan.. amonji@hf.rim.or.jp
SOURCE: JOURNAL OF NEUROCHEMISTRY, (2001 Jun) 77 (6) 1425-32.
Journal code: 2985190R. ISSN: 0022-3042.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200107
ENTRY DATE: Entered STN: 20010723
Last Updated on STN: 20010723
Entered Medline: 20010719

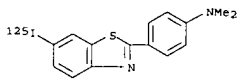
AB In the present study, we investigated whether or not the **amyloid**-beta protein (Abeta) peptide itself spontaneously generates free radicals using electron spin resonance (ESR) spectroscopy while also monitoring the aggregational state of Abeta and Abeta-induced cytotoxicity. The present results demonstrated a four-line spectrum in the presence of both Abeta40 and Abeta42 with Ntert-butyl-alpha-phenylnitrone (PBN), but not in the presence of PBN alone in phosphate-buffered saline (PBS). The fact that the four-line spectrum obtained for the Abeta/PBN in PBS was completely abolished in the presence of the iron-**chelating** agent Desferal demonstrated the observed four-line spectrum to be iron-dependent. The present study also revealed that either Abeta40 or Abeta42 with PBN in phosphate buffer (PB) did not produce any definite four-line spectrum. Both a thioflavine-T (Th-T) fluorometric assay and circular dichroism (CD) spectroscopy showed the **amyloid** fibril formation of Abeta in PBS to be much higher than that of Abeta in PB. Moreover, Abeta-induced cytotoxicity assays showed Abeta incubated in PBS to be more cytotoxic than that incubated in PB. These results thus suggest that Abeta-associated free radical generation is strongly influenced by the aggregational state of the peptides.

L8 ANSWER 15 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2001:547100 BIOSIS
DOCUMENT NUMBER: PREV200100547100
TITLE: In vivo detection of beta **amyloid** plaques in AD with iodinated thioflavin derivatives.
AUTHOR(S): Kung, M. P. (1); Hou, C. (1); Zhuang, Z. P. (1); Skovronsky, D.; Gur, T. L.; Zhang, B.; Trojanowski, J. Q.; Lee, V. M. Y.; Kung, H. F. (1)
CORPORATE SOURCE: (1) Radiology, Univ Pennsylvania, Philadelphia, PA USA
SOURCE: Society for Neuroscience Abstracts, (2001) Vol. 27, No. 1, pp. 1217. print.
Meeting Info.: 31st Annual Meeting of the Society for Neuroscience San Diego, California, USA November 10 15, 2001
ISSN: 0190-5295.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Accumulation of **amyloid** plaques in the brain is considered one of the most significant factors in Alzheimer's disease (AD). Thus, development of small molecule-based probes for in vivo plaque detection will be useful for early diagnosis as well as in assisting drug development for treatment of AD. Based on the structure of thioflavin, a commonly used gold standard for fluorescent staining of plaques and tangles, we prepared a series of neutral iodinated derivatives for mapping
Abeta aggregates in AD brains. Two radioiodinated probes, (125I)TZDM and (125I)IBOX, showed exquisitely high binding affinities to synthetic aggregates of Abeta40 and Abeta42 (Kd values in sub nM ranges). In post-mortem brain sections of AD patients containing abundant **amyloid** plaques, both (125I)TZDM and (125I)IBOX displayed distinct labeling of plaques by film autoradiography. The labeling of Abeta plaques
by these two **ligands** was consistent with the thioflavin S staining visualized by fluorescent microscopic imaging. In vivo biodistribution studies in normal mice showed that both (125I)TZDM and (125I)IBOX exhibited excellent peak brain uptakes (1.5-2.0% ID). Initial studies of (125I)TZDM in transgenic mice engineered to produce excess Abeta aggregates clearly indicated in vivo plaque labeling. These new iodinated thioflavin derivatives may provide better candidates for further
development of the in vivo mapping agents critically important for evaluation of AD.

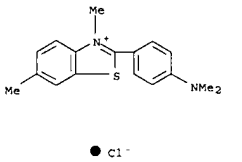
L8 ANSWER 16 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001322946 EMBASE
TITLE: The fluorescent Congo red derivative, (trans, trans)-1-bromo 2,5-bis-(3-hydroxycarbonyl-4-Hydroxy)styrylbenzene (bsb), labels diverse .beta.-pleated sheet structures in postmortem human neurodegenerative disease brains.
AUTHOR: Schmidt M.L.; Schuck T.; Sheridan S.; Kungt M.-P.; Kung H.;
Zhuang Z.-P.; Bergeron C.; Lamarche J.S.; Skovronsky D.; Giasson B.I.; Lee V.M.-Y.; Trojanowski J.Q.
CORPORATE SOURCE: Dr. J.Q. Trojanowski, Ctr. for Neurodegenerative Dis. Res.,
Department of Pathology, University of Pennsylvania, 36th and Spruce Streets, Philadelphia, PA 19104-4283, United States. trojanow@mail.med.upenn.edu
SOURCE: American Journal of Pathology, (2001) 159/3 (937-943). Refs: 22
ISSN: 0002-9440 CODEN: AJPAA4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
008 Neurology and Neurosurgery
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB A novel Congo red-derived fluorescent probe (trans, trans), -1-bromo-2,5-bis-(3-hydroxycarbonyl-4-hydroxy)styrylbenzene (BSB) that binds to **amyloid** plaques of postmortem Alzheimer's disease brains and in transgenic mouse brains in vivo was designed as a prototype imaging agent for Alzheimer's disease. In the current study, we used BSB to probe postmortem tissues from patients with various neurodegenerative diseases with diagnostic lesions characterized by fibrillar intra- or extracellular lesions and compared these results with standard histochemical dyes such as thioflavin S and immunohistochemical stains specific for the same lesions. These data show that BSB binds not only to extracellular **amyloid** .beta. protein, but also many intracellular lesions composed of abnormal tau and synuclein proteins and suggests that radioiodinated BSB derivatives or related **ligands** may be useful imaging agents to monitor diverse **amyloids** in vivo.

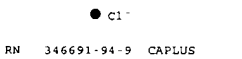
L8 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:827673 CAPLUS
DOCUMENT NUMBER: 137:59572
TITLE: IBOX (2-(4'-dimethylaminophenyl)-6-iodobenzoxazole): a
ligand for imaging **amyloid** plaques in the brain
AUTHOR(S): Zhuang, Zhi-Ping; Kung, Mei-Ping; Hou, Catherine; Plossl, Karl; Skovronsky, Daniel; Gur, Tamar L.; Trojanowski, John Q.; Lee, Virginia M.-Y.; Kung, Hank F.
CORPORATE SOURCE: Department of Radiology, University of Pennsylvania, Philadelphia, PA, 19104, USA
SOURCE: Nuclear Medicine and Biology (2001), 28(8), 887-894
CODEN: NMBIEO; ISSN: 0969-8051
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB It is well known that overprodn. and accumulation of .beta.-**amyloid** (A.beta.) plaques in the brain is a key event in the pathogenesis of Alzheimer's disease (AD). Previously it was demonstrated that [125I]TZDM, 2-(4'-dimethylaminophenyl)-6-iodobenzothiazole, a thioflavin deriv., was an effective **ligand** with good in vitro and in vivo binding characteristics. To further improve the initial uptake and washout rate from the brain, important properties for in vivo imaging agents, a novel radioiodinated **ligand**, 2-(4'-dimethylaminophenyl)-6-iodobenzoxazole ([125I]IBOX), for detecting A.beta. plaques in the brain, was synthesized and evaluated. The new iodinated **ligand**, IBOX, is based on an isosteric replacement of a sulfur atom of TZDM by an oxygen, by which the mol. wt. is reduced while
the lipophilicity of the iodinated **ligand** is increased. Partition coeffs. (P.C.) of these two **ligands** were 70 and 124 for TZDM and IBOX, resp. In vitro binding study indicated that the isosteric displacement yielded a new **ligand** with equal binding potency to A.beta.(1-40) aggregates (Ki = 1.9 and 0.8 nM for TZDM and IBOX, resp.). Autoradiog. of postmortem brain sections of a confirmed AD patient by [125I]IBOX showed excellent labeling of plaques similar to that
obsd. with [125I]TZDM. More importantly, in vivo biodistribution of [125I]IBOX in normal mice displayed superior peak brain uptake (2.08% at 30 min vs 1.57% at 60 min dose/brain for [125I]IBOX and [125I]TZDM, resp.). In addn., the washout from the brain was much faster for [125I]IBOX as compared to [125I]TZDM. Based on the data presented for [125I]IBOX, it is predicted that the brain trapping of this new radioiodinated **ligand** in the A.beta. contg. regions will be more favorable than that of the parent compd., [125I]TZDM. Further evaluation of [125I]IBOX is warranted to confirm the A.beta. plaque labeling properties in vivo.
IT **346691-96-1**
RL: DGN (Diagnostic use); PKT (Pharmacokinetics); BIOL (Biological study);
USES (Uses)
(radioiodinated (dimethylaminophenyl)iodobenzoxazole for imaging **amyloid** plaques in brain: comparison with [125I]TZDM)
RN 346691-96-1 CAPLUS
CN Benzenamine, 4-[6-(iodo-125I)-2-benzothiazolyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

L8 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)

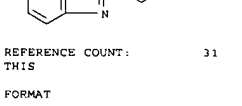


IT **2390-54-7**, Thioflavin T **346691-94-9**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(radioiodinated (dimethylaminophenyl)iodobenzoxazole for imaging **amyloid** plaques in brain: effect of thioflavins on [125I]TZDM binding)
RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)





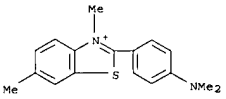
RN 346691-94-9 CAPLUS
CN Benzenamine, 4-(6-iodo-2-benzothiazolyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 18 OF 26 MEDLINE
ACCESSION NUMBER: 2001406053 MEDLINE
DOCUMENT NUMBER: 21349725 PubMed ID: 11457435
TITLE: Multiple **ligand** interaction of alpha-synuclein produced various forms of protein aggregates in the presence of Abeta25-35, copper, and eosin.
AUTHOR: Kim Y S; Lee D; Lee E K; Sung J Y; Chung K C; Kim J; Paik S
R
CORPORATE SOURCE: Department of Pathology, Korea University Ansan Hospital, Gojan-Dong, 425-020, Ansan, South Korea.
SOURCE: BRAIN RESEARCH, (2001 Jul 20) 908 (1) 93 8.
Journal code: 0045503. ISSN: 0006-8993.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200109
ENTRY DATE: Entered STN: 20010924
Last Updated on STN: 20010924
Entered Medline: 20010920
AB Various protein aggregates of alpha-synuclein developed by way of the common protein self-oligomerization in the presence of Abeta25-35, copper,
and eosin were examined. All the aggregates exhibited congo red birefringence although the actual amounts of the aggregates were varied as
determined by thioflavin T binding fluorescence. When their morphologies were analyzed in relation to in vitro cytotoxicity, the smallest granular aggregates obtained with copper exhibited the highest cytotoxicity, while the fibrous structures by eosin did not affect the cell.

L8 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:665323 CAPLUS
DOCUMENT NUMBER: 134:130
TITLE: Affinity capillary electrophoresis is a powerful tool to identify transthyretin binding drugs for potential therapeutic use in **amyloidosis**
AUTHOR(S): De Lorenzi, Ersilia; Galbusera, Chiara; Bellotti, Vittorio; Mangione, Palma; Massolini, Gabriella; Tabolotti, Elena; Andreola, Alessia; Caccialanza, Gabriele
CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Pharmacy, University of Pavia, Pavia, 27100, Italy
SOURCE: Electrophoresis (2000), 21(15), 3280-3289
CODEN: ELCTDN; ISSN: 0173-0835
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In this work we used affinity capillary electrophoresis (ACE) to investigate the extent of interaction between a pool of drugs and wild-type transthyretin. After qual. preliminary screening, attention was
focused on the most promising mols., flufenamic acid and flurbiprofen, which underwent a further stage of investigation, the detn. of the binding
consts., and, when possible, the assessment of the no. of binding sites by
ACE, frontal anal. (FA) capillary electrophoresis (CE) and parallel ultrafiltration (UF) expts. Furthermore, our data demonstrate that FA CE is a suitable technique for identifying fibril **ligands**. This represents a novel CE application of pharmaceutical interest.
IT **2390-54-7**, Thioflavin T
RL: ANT (Analyte); ANST (Analytical study)
(affinity capillary electrophoresis is a powerful tool to identify transthyretin binding drugs for potential therapeutic use in **amyloidosis**)
RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)



● Cl⁻

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

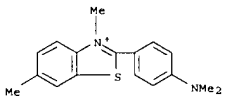
L8 ANSWER 19 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)

L8 ANSWER 20 OF 26 USPATFULL
ACCESSION NUMBER: 1999:92643 USPATFULL
TITLE: Compositions and methods for stimulating **amyloid** removal in **amyloidogenic** diseases using advanced glycosylation endproducts
INVENTOR(S): Vitek, Michael P., East Norwich, NY, United States
Cerami, Anthony, Shelter Island, NY, United States
Bucala, Richard J., New York, NY, United States
Ulrich, Peter C., Old Tappan, NJ, United States
Vlassara, Helen, Shelter Island, NJ, United States
Zhang, Xini, Jericho, NJ, United States
PATENT ASSIGNEE(S): The Picower Institute For Medical Research, Manhasset, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5935927		19990810	
	WO 9520979		19950810	
APPLICATION INFO.:	US 1996-501127		19960810	(8)
	WO 1995-US1380		19950202	
			19960810	PCT 371 date
			19960810	PCT 102(e) date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-311768, filed on 23 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-191579, filed on 3 Feb 1994, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Duffy, Patricia A.
LEGAL REPRESENTATIVE: Klauber & Jackson
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 2154
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to methods and compositions for treating **amyloidogenic** diseases such as Alzheimer's disease and the development of type II diabetes, in which deposition of **amyloid** in organs such as the brain and pancreas interfere with neurological function and insulin release, respectively. The methods and
compositions are directed toward increasing the activity of scavenger cells within the body at recognizing and removing **amyloid** deposits from affected tissues and organs. Scavenger cells may be targeted to **amyloid** deposits by means of spontaneously-occurring chemical modifications called advanced glycosylation endproducts (AGEs). Compositions are described which increase scavenger cell activity towards AGE-modified **amyloid**. **Amyloid** removal may also be enhanced by increasing AGE levels in **amyloid** deposits within the body by administering AGE-modified **amyloid** targeting agents, which after becoming situated at sites containing **amyloid**, subsequently attract scavenger cells to degrade attendant **amyloid**. These methods and associated compositions result in a decrease in the extent of **amyloid** deposits in tissues, reducing the attendant pathology.
IT **2390-54-7D**, Thioflavin, advanced glycosylation end-product conjugates **169553-19-9 169553-21-3**
(advanced glycosylation end-products for amyloid removal stimulation in
amyloidogenic diseases)
RN 2390-54-7 USPATFULL

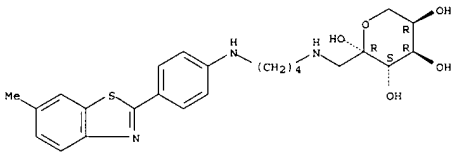
L8 ANSWER 20 OF 26 USPATFULL (Continued)
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl-, chloride (9CI)
(CA INDEX NAME)



● Cl⁻

RN 169553-19-9 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1 [[4 [[4 (6-methyl-2-benzothiazolyl)phenyl]amino]butyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

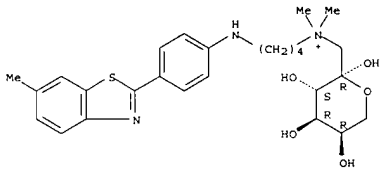


● HCl

RN 169553-21-3 USPATFULL
CN .beta. D-Fructopyranose, 1-deoxy-1-[dimethyl[4 [[4-(6 methyl-2 benzothiazolyl)phenyl]amino]butyl]ammonio]-, chloride (9CI) (CA INDEX NAME)

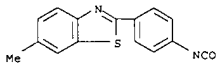
Absolute stereochemistry.

L8 ANSWER 20 OF 26 USPATFULL (Continued)

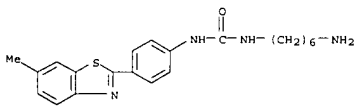


● Cl⁻

IT **67229-93-0P 169553-13-3P 169553-14-4P**
169553-16-6P 169553-17-7P 169553-18-8P
169553-20-2P
(prepn. and reaction; advanced glycosylation end-products for amyloid removal stimulation in amyloidogenic diseases)
RN 67229-93-0 USPATFULL
CN Benzothiazole, 2-(4-isocyanatophenyl)-6-methyl- (9CI) (CA INDEX NAME)



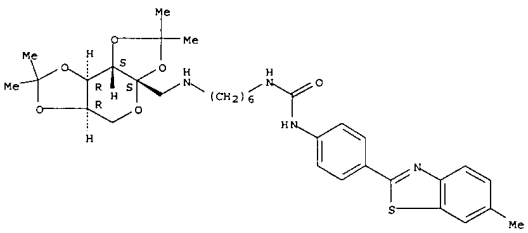
RN 169553-13-3 USPATFULL
CN Urea, N-(6-aminohexyl)-N' [4-(6-methyl 2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



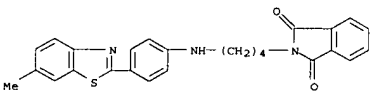
RN 169553-14-4 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[6-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]hexyl]amino]-2,3:4,5-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

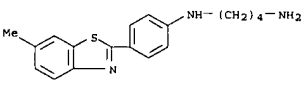
L8 ANSWER 20 OF 26 USPATFULL (Continued)



RN 169553-16-6 USPATFULL
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]- (9CI) (CA INDEX NAME)



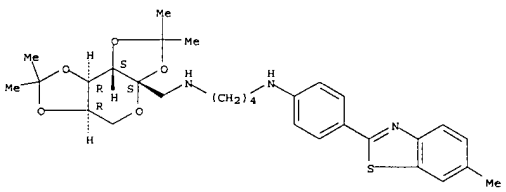
RN 169553-17-7 USPATFULL
CN 1,4-Butanediamine, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 169553-18-8 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[4-[[4-(6-methyl 2-benzothiazolyl]phenyl]amino]butyl]amino]-2,3:4,5-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

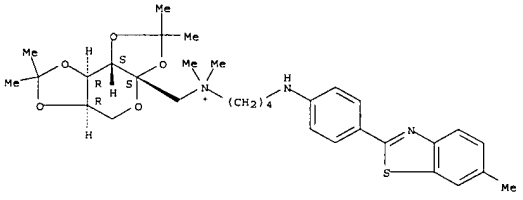
Absolute stereochemistry.

L8 ANSWER 20 OF 26 USPATFULL (Continued)



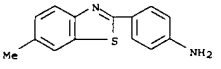
RN 169553-20-2 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[dimethyl[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]ammonio]-2,3:4,5-bis-O-(1-methylethylidene)-, iodide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● I⁻

IT **92-36-4**, 2-(4-Aminophenyl)-6-methylbenzothiazole
(reaction; advanced glycosylation end-products for amyloid removal stimulation in amyloidogenic diseases)
RN 92-36-4 USPATFULL
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



L8 ANSWER 21 OF 26 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1999:50505 BIOSIS
DOCUMENT NUMBER: PREV199900050505
TITLE: Inhibition of **amyloid** Abeta42-mediated seeding by metal **chelators**.
AUTHOR(S): Huang, X. (1); Atwood, C. S.; Hartshorn, M. A.; Cuajungco, M. P.; Goldstein, L. E.; Saunders, A. J.; Scarpa, R. C.; Leski, M. L.; Lim, J.; Moir, R. D.; Tani, R. E.; Bush, A. J.
CORPORATE SOURCE: (1) Genet. and Aging Unit, Harv. Med. Sch., Mass. Gen. Hosp., Charlestown, MA 02129 USA
SOURCE: Society for Neuroscience Abstracts, (1998) Vol. 24, No. 1 2, pp. 508.
Meeting Info.: 28th Annual Meeting of the Society for Neuroscience, Part 1 Los Angeles, California, USA November 7 12, 1998 Society for Neuroscience
. ISSN: 0190-5295.
DOCUMENT TYPE: Conference
LANGUAGE: English

L8 ANSWER 22 OF 26 MEDLINE
ACCESSION NUMBER: 97330033 MEDLINE
DOCUMENT NUMBER: 97330033 PubMed ID: 9186492
TITLE: Stopped flow kinetics reveal multiple phases of thioflavin T binding to Alzheimer beta (1-40) **amyloid** fibrils.
AUTHOR: LeVine H 3rd
CORPORATE SOURCE: Neurodegenerative Diseases, Parke-Davis Pharmaceutical Research Division, Warner-Lambert Company, Ann Arbor, Michigan 48105 1047, USA.. LEVINEH@aa.wl.com
SOURCE: ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, (1997 Jun 15) 342 (2) 306-16.
Journal code: 0372430. ISSN: 0003-9861.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199707
ENTRY DATE: Entered STN: 19970721
Last Updated on STN: 19980206
Entered Medline: 19970710
AB The benzothiazole dye thioflavin T (ThT) is a classical **amyloid** stain for senile plaques containing beta/A4 peptide in Alzheimer's disease brain. ThT also binds rapidly and specifically to the anti-parallel beta-sheet fibrils formed from synthetic beta (1-40) peptide, but does not bind to monomer or oligomeric intermediates. The fibrillar beta-sheet-bound dye species undergoes a characteristic 120 nm red shift of its excitation spectrum that may be selectively excited at 450 nm, resulting in a fluorescence signal at 482 nm. Mixing of preformed beta (1-40) **amyloid** fibrils with ThT in a stopped-flow spectrophotometer, monitoring fluorescence emission at > 475 nm while exciting at 450 nm, distinguished multiple kinetic phases of roughly equivalent amplitude with tau's in the ranges of 0.007, 0.05, 0.75, and 10-20 s. The fastest reaction appears to reflect a bimolecular dye binding event while the remaining reactions are rate-limited by protein tertiary or quaternary conformational changes. The high activation energies of the three slower reactions support this interpretation. The ThT concentration dependence of the reaction rates at different ratios of ThT/beta (1-40) **amyloid** fibrils rules out a rate-limiting conformational change occurring prior to **ligand** binding. ThT is a useful probe for the aggregated fibrillar state of beta (1-40) **amyloid** fibrils as the **amyloid**-specific fluorescence reports only fibrillar species. The binding of ThT does not interfere with the aggregation of this peptide into **amyloid** fibrils. The putative conformational changes detected by the ThT fluorescence suggest that small pharmacologic **ligands** can perturb and possibly dissociate A beta **amyloid** fibrils.

L8 ANSWER 23 OF 26 MEDLINE
ACCESSION NUMBER: 96196768 MEDLINE
DOCUMENT NUMBER: 96196768 PubMed ID: 8608006
TITLE: Acetylcholinesterase accelerates assembly of **amyloid**-beta-peptides into Alzheimer's fibrils: possible role of the peripheral site of the enzyme.
AUTHOR: Inestrosa N C; Alvarez A; Perez C A; Moreno R D; Vicente M;
Linker C; Casanueva O I; Soto C; Garrido J
CORPORATE SOURCE: Departamento de Biologia Celular y Molecular Facultad de Ciencias Biologicas Pontificia Universidad Catolica de Chile, Santiago, Chile.
SOURCE: NEURON, (1996 Apr) 16 (4) 881-91.
Journal code: 8809320. ISSN: 0896-6273.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199605
ENTRY DATE: Entered STN: 19960605
Last Updated on STN: 19980206
Entered Medline: 19960528
AB Acetylcholinesterase (AChE), an important component of cholinergic synapses, colocalizes with **amyloid**-beta peptide (A beta) deposits of Alzheimer's brain. We report here that bovine brain AChE, as well as the human and mouse recombinant enzyme, accelerates **amyloid** formation from wild-type A beta and a mutant A beta peptide, which alone produces few **amyloid**-like fibrils. The action of AChE was independent of the subunit array of the enzyme, was not affected by edrophonium, an active site inhibitor, but it was affected by propidium, a peripheral anionic binding site **ligand**. Butyrylcholinesterase, an enzyme that lacks the peripheral site, did not affect **amyloid** formation. Furthermore, AChE is a potent **amyloid**-promoting factor when compared with other A beta-associated proteins. Thus, in addition to its role in cholinergic synapses, AChE may function by accelerating A beta formation and could play a role during **amyloid** deposition in Alzheimer's brain.

L8 ANSWER 24 OF 26 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 96253619 EMBASE
DOCUMENT NUMBER: 1996253619
TITLE: Synthesis and characterization of a solid vanadyl(IV) complex of D- glucuronic acid.
AUTHOR: Etcheverry S.B.; Williams P.A.M.; Baran E.J.
CORPORATE SOURCE: Quimica Inorganica, Facultad de Ciencias Exactas, UNLP, C. Correo 962,1900-La Plata, Argentina
SOURCE: Journal of Inorganic Biochemistry, (1996) 63/4 (285-289). ISSN: 0162-0134 CODEN: JIBIDJ
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB It was possible to develop a synthetic procedure which enables the preparation of microcrystalline samples of the sodium salt of the complex union bis (D-glucuronato)oxovanadium(IV), a new example of a solid VO2+/carbohydrate complex, in which the oxocation is **chelated** by pairs of adjacent diol groups. The compound was characterized by chemical analysis, electronic (reflectance), and infrared spectroscopy.

L8 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:887989 CAPLUS
DOCUMENT NUMBER: 123:276079
TITLE: Compositions and methods for advanced glycosylation endproduct-mediated modulation of **amyloidosis**
INVENTOR(S): Vitek, Michael P.; Cerami, Anthony; Bucala, Richard J.; Ulrich, Peter C.; Vlassara, Helen; Zhang, Xini
PATENT ASSIGNEE(S): Picower Institute for Medical Research, USA
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9520979	A1	19950810	WO 1995 US1380	19950202
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2182731	AA	19950810	CA 1995-2182731	19950202
AU 9518701	A1	19950821	AU 1995-18701	19950202
AU 692237	B2	19980604		
EP 802797	A1	19971029	EP 1995-910911	19950202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT				
JP 09511492	T2	19971118	JP 1995-520751	19950202
US 6410598	B1	20020625	US 1995-477364	19950607
US 5935927	A	19990810	US 1996-501127	19960810

PRIORITY APPLN. INFO.: US 1994-191579 A 19940203
US 1994-311768 A 19940923
WO 1995-US1380 W 19950202
US 1995-457169 A2 19950601

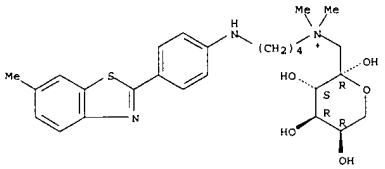
OTHER SOURCE(S): MARPAT 123:276079

AB The present invention relates generally to the nonenzymic glycosylation of **amyloidogenic** proteins and the consequent formation of advanced glycosylation endproducts (AGEs). It has been found that formation of AGE-**amyloidogenic** proteins can enhance **amyloidosis**. The invention further relates to compns. and methods for the prevention and treatment of **amyloidosis** assocd. with **amyloid** diseases, particularly neurodegenerative disease and Type II diabetes, and more particularly Alzheimer"s disease. In a specific example, aggregation of an **amyloidogenic** peptide, .beta.-AP, is enhanced by the glycosylation reaction of .beta.-AP to form AGE-.beta.-AP as defined herein. Accordingly, the invention extends to a method for modulating the in vivo aggregation of **amyloid** polypeptides and assocd. **amyloidosis** by controlling the formation and presence of AGE-**amyloid** polypeptide. A corresponding diagnostic utility comprises the measurement of the course and extent of **amyloidosis** by a measurement of the presence and amt. of AGEs and particularly, AGE-**amyloid**. An assay is included that may use the AGE-**amyloid** polypeptide of the present invention to identify disease states characterized by the presence of AGE-**amyloid**. Addnl., such an assay can be utilized to monitor therapy and thus adjust a dosage regimen for a given disease state characterized by the presence of AGE-**amyloid**. Prepn. of AGE-thioflavins is also described. Binding to **amyloid** of a thioflavin T-amadori product was demonstrated.

IT **169553-21-3P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(advanced glycosylation endproduct-mediated modulation of **amyloidosis**)

RN 169553-21-3 CAPLUS
CN .beta.-D-Fructopyranose, 1-deoxy-1-[dimethyl[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]ammonio]-, chloride (9CI) (CA INDEX NAME)

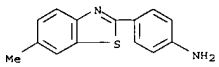
Absolute stereochemistry.



● Cl⁻

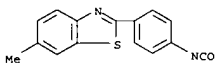
IT **92-36-4**, 2-(4-Aminophenyl)-6-methylbenzothiazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(advanced glycosylation endproduct-mediated modulation of **amyloidosis**)

RN 92-36-4 CAPLUS
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

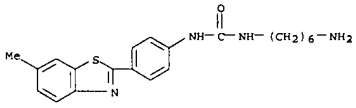


IT **67229-93-0P 169553-13-3P 169553-14-4P**
169553-16-6P 169553-17-7P 169553-18-8P
169553-20-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(advanced glycosylation endproduct-mediated modulation of **amyloidosis**)

RN 67229-93-0 CAPLUS
CN Benzothiazole, 2-(4-isocyanatophenyl)-6-methyl- (9CI) (CA INDEX NAME)

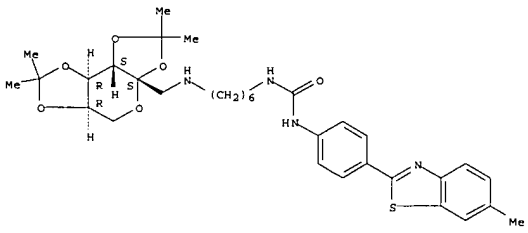


RN 169553-13-3 CAPLUS
CN Urea, N-(6-aminohexyl)-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

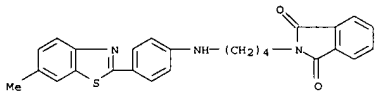


RN 169553-14-4 CAPLUS
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[6-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]hexyl]amino]-2,3:4,5-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

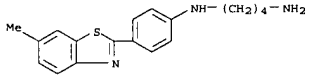
Absolute stereochemistry.



RN 169553-16-6 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]- (9CI) (CA INDEX NAME)

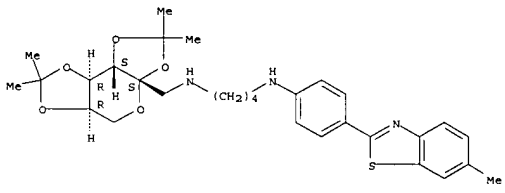


RN 169553-17-7 CAPLUS
CN 1,4-Butanediamine, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 169553-18-8 CAPLUS
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]amino]-2,3:4,5-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

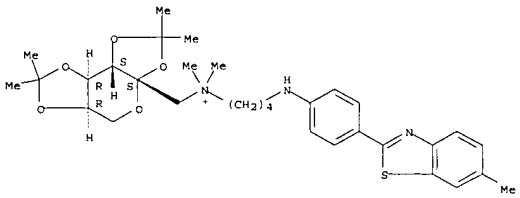
Absolute stereochemistry.



RN 169553-20-2 CAPLUS
CN .beta.-D-Fructopyranose, 1-deoxy-1-[dimethyl[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]ammonio]-2,3:4,5-bis-O-(1-methylethylidene)-, iodide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

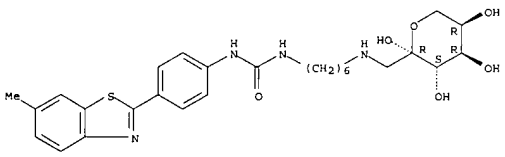
L8 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)



● I⁻

IT **169553-15-5P 169553-19-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(advanced glycosylation endproduct-mediated modulation of **amyloidosis**)
RN 169553-15-5 CAPLUS
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[6-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]hexyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 169553-19-9 CAPLUS
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

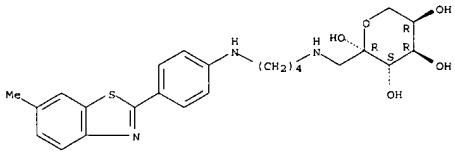
Absolute stereochemistry.

L8 ANSWER 26 OF 26 MEDLINE

ACCESSION NUMBER: 88258085 MEDLINE
DOCUMENT NUMBER: 88258085 PubMed ID: 2455001
TITLE: **Amyloid** P component binds to keratin bodies in human skin and to isolated keratin filament aggregates in vitro.
AUTHOR: Hintner H; Booker J; Ashworth J; Aubock J; Pepys M B; Breathnach S M
CORPORATE SOURCE: Department of Medicine, (Dermatology), Charing Cross and Westminister Medical School, London, U.K.
SOURCE: JOURNAL OF INVESTIGATIVE DERMATOLOGY, (1988 Jul) 91 (1) 22-8.
Journal code: 0426720. ISSN: 0022-202X.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198808
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19960129
Entered Medline: 19880802

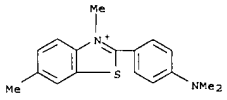
AB Dermal keratin bodies, consisting mainly of keratin intermediate filament aggregates (KIFA) coated with IgM anti-KIF autoantibodies, are present in normal human skin and occur in increased quantities in certain skin diseases. Keratin bodies are normally rapidly removed, but in primary localized cutaneous **amyloidosis** (PLCA) they are converted by an unknown mechanism to **amyloid**. **Amyloid** P component (AP), a glycoprotein identical to, and derived from, the normal plasma protein serum **amyloid** P component (SAP), is present in all forms of **amyloid** including PLCA. We investigated the interaction between SAP, keratin bodies, and KIFA. Immunofluorescence staining of normal skin using fluoresceinated anti-SAP and rhodamine-conjugated anti-IgM, or AE-1/AE-3 anti-keratin antibodies followed by Texas Red-conjugated anti-mouse immunoglobulin, showed that 52% +/- 4 (mean +/- sem, n = 6) of keratin bodies bound anti-SAP. Similar findings were present in a biopsy from a patient with lichen planus. Isolated KIFA, prepared by 8M urea extraction of normal human epidermis or cultured keratinocytes, were preincubated with normal human serum as a source of SAP and then stained with fluoresceinated anti-SAP. Bright fluorescence seen when the incubation medium contained Ca++ was absent in the presence of ethylenediamine tetraacetic acid. Specific Ca++-dependent binding of SAP to KIFA was confirmed using immunoblotting. Binding of SAP to KIFA did not prevent their degradation following exposure to trypsin or alpha-chymotrypsin. Similarly, partial enzymatic digestion of KIFA did not abrogate their ability to bind SAP. Our findings, that SAP is associated with keratin bodies in skin and exhibits Ca++-dependent binding to KIFA in vitro, identify keratin filaments as a newly recognized **ligand** for SAP.

L8 ANSWER 25 OF 26 CAPLUS COPYRIGHT 2002 ACS (Continued)



● HCl

IT **2390-54-7**, Thioflavin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(modified; advanced glycosylation endproduct-mediated modulation of **amyloidosis**)
RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)



● Cl⁻

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L10 ANSWER 1 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:736495 CAPLUS
DOCUMENT NUMBER: 137:244284
TITLE: Neurofibrillary labels
INVENTOR(S): Wischik, Claude Michel; Harrington, Charles Robert; Rickard, Janet Elizabeth; Horsley, David
PATENT ASSIGNEE(S): University of Aberdeen, UK
SOURCE: PCT Int. Appl., 160 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

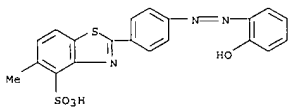
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002075318	A2	20020926	WO 2002-GB1318	20020320

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-6953 A 20010320

AB Disclosed are methods for detg. the stage of neurofibrillary degeneration assocd. with a tauopathy in a subject believed to suffer from the disease, which methods comprise the steps of: (i) introducing into the subject a **ligand** capable of labeling aggregated paired helical filament (PHF) tau protein, (ii) detg. the presence and/or amt. of **ligand** bound to extracellular aggregated PHF tau in the medial temporal lobe of the brain of the subject, (iii) correlating the result of the detn. made in (ii) with the extent of neurofibrillary degeneration in the subject. The methods can be used for pre-mortem diagnosis and staging of tauopathies such as Alzheimer's Disease. Preferred **ligands** include sulfonated-benzothiazole-like compds. and diaminophenothiazines. Novel **ligands** (e.g. sulfonated-benzothiazole-like compds.) are also provided. The method may also include the use of "blocking **ligands**" to block competing binding sites. In other aspects the invention provides in vitro methods for identifying **ligands** capable of labeling aggregated PHF tau protein, the methods comprising the steps of: (i) providing a first agent suspected of being capable of labeling aggregated PHF tau protein, (ii) contacting (a) a tau protein or a deriv. thereof contg. the tau core fragment bound to a solid phase so as to expose a high affinity tau capture site, with (b) a liq. phase tau protein or deriv. thereof capable of binding to the solid phase tau protein or deriv., and (c) said selected first agent and (d) a second agent known to be tau-tau binding inhibitor, (iii) selecting first agent which fully or partially relieves the inhibition of binding of the liq. phase tau protein or deriv. of (b) to the solid phase tau protein or deriv. of (a) by the inhibitor (d). **Ligands** may also be tested

L10 ANSWER 1 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
to confirm that they are not themselves inhibitors.
IT **461001-23-0**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (neurofibrillary labels)
RN 461001-23-0 CAPLUS
CN 4-Benzothiazolesulfonic acid, 2-[4-[(2-hydroxyphenyl)azo]phenyl]-5-methyl-, monosodium salt (9CI) (CA INDEX NAME)



● Na

L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:504768 CAPLUS
DOCUMENT NUMBER: 137:78945
TITLE: Preparation of benzoxazoles and benzothiazoles as selective **ligands** for human .beta.-estrogen receptor
INVENTOR(S): Barlaam, Bernard; Bernstein, Peter; Dantzman, Cathy; Warwick, Paul
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051821	A1	20020704	WO 2001-SE2855	20011219

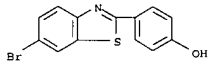
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: SE 2000-4825 A 20001222
SE 2000-4826 A 20001222
OTHER SOURCE(S): MARPAT 137:78945

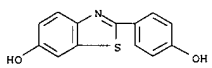
AB This invention discloses the prepn. of title compds. I and their pharmaceutically acceptable salts and solvates, via cyclication of key intermediate II [wherein: X = O, S; Z = OL, SL, NH2, H; L = H or leaving group; Y = NHCOR1, OCOR1, N:CHR1, NHCSR1; R1 = (un)substituted alkyl, Ph, benzyl, heterocyclic ring contg. 1-3 heteroatoms (e.g., O, N or S) possessing 0-1 oxo groups and 0-1 fused benzo rings; R3 = (un)substituted alkyl, halo, CN, NO2, etc.; R4, R5, R6 = halo, CN, NO2, etc.]. For example, potassium ferricyanide mediated ring-closure of N-(3-cyano-5-methoxyphenyl)-4-methoxythiobenzamide provided thiobenzamide III (49%), followed by deprotection provided claimed benzothiazole I [X = S; R1 = 4-HOC6H4; R5 = OH; R3 = CN; R4, R6 = H] in 39% yield. In human estrogen receptor binding assays, I demonstrated Ki values for .beta.-ER in the range of 0.017-1000 (nM) and selectivity (ER-.beta./ER-.alpha.) of 1.8-363. Compds. of the present invention are shown to have high selectivity for human ER-.beta. over ER-.alpha. and may possess agonist activity on EB-.beta. without undesired uterine effects. As selective ER-.beta. **ligands**, I are useful in the treatment or prophylaxis of Alzheimer's disease, anxiety disorders, depressive disorders, osteoporosis, cardiovascular disease, rheumatoid arthritis or prostate cancer.

IT **103200-48-2P**, 6-Bromo-2-(4-hydroxyphenyl)benzothiazole
142648-17-7P, 2-(4-Hydroxyphenyl)-6-hydroxybenzothiazole
178804-18-7P, 2-(4-Aminophenyl)-6-hydroxybenzothiazole
440122-94-1P, 4-Methyl-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole
440122-97-4P, 4-Cyanomethyl-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-00-2P**, 4-Acetylene-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-03-5P**, 4-Carboxy-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-12-6P**, 4-Cyano-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-13-7P**, 4-Bromo-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-14-8P**, 4-Iodo-6-hydroxy-2-(4-hydroxyphenyl)benzothiazol **440123-15-9P**, 4-Chloro-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-16-0P** **440123-17-1P**, 7-Chloro-6-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-18-2P**, 7-Cyano-5-hydroxy-2-(4-hydroxyphenyl)benzothiazole **440123-34-2P** **440123-36-4P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of benzoxazoles and benzothiazoles as selective **ligands** for human .beta.-estrogen receptor (ER-.beta.))

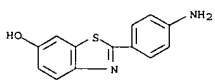
RN 103200-48-2 CAPLUS
CN Phenol, 4-(6-bromo-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



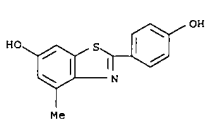
RN 142648-17-7 CAPLUS
CN 6-Benzothiazolol, 2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 178804-18-7 CAPLUS
CN 6-Benzothiazolol, 2-(4-aminophenyl)- (9CI) (CA INDEX NAME)

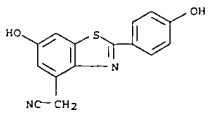


RN 440122-94-1 CAPLUS
CN 6-Benzothiazolol, 2-(4-hydroxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)

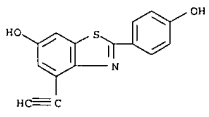


RN 440122-97-4 CAPLUS
CN 4-Benzothiazoleacetonitrile, 6-hydroxy-2-(4-hydroxyphenyl)- (9CI) (CA

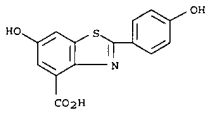
L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
INDEX NAME)



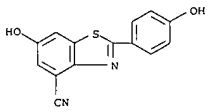
RN 440123-00-2 CAPLUS
CN 6-Benzothiazolol, 4-ethynyl-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



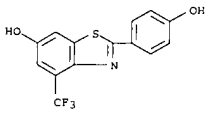
RN 440123-03-5 CAPLUS
CN 4-Benzothiazolecarboxylic acid, 6-hydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



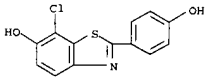
RN 440123-12-6 CAPLUS
CN 4-Benzothiazolecarbonitrile, 6-hydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



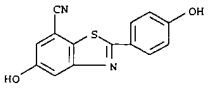
L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



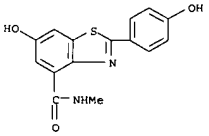
RN 440123-17-1 CAPLUS
CN 6-Benzothiazolol, 7-chloro-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 440123-18-2 CAPLUS
CN 7-Benzothiazolecarbonitrile, 5-hydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



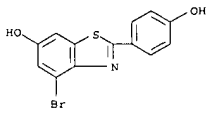
RN 440123-34-2 CAPLUS
CN 4-Benzothiazolecarboxamide, 6-hydroxy-2-(4-hydroxyphenyl)-N-methyl- (9CI) (CA INDEX NAME)



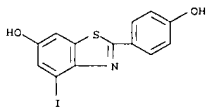
RN 440123-36-4 CAPLUS
CN 4-Benzothiazolecarboxamide, 6-hydroxy-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)

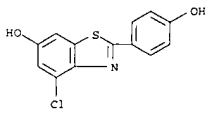
RN 440123-13-7 CAPLUS
CN 6-Benzothiazolol, 4-bromo-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 440123-14-8 CAPLUS
CN 6-Benzothiazolol, 2-(4-hydroxyphenyl)-4-iodo- (9CI) (CA INDEX NAME)

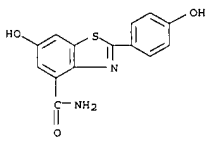


RN 440123-15-9 CAPLUS
CN 6-Benzothiazolol, 4-chloro-2-(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)



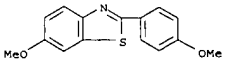
RN 440123-16-0 CAPLUS
CN 6-Benzothiazolol, 2-(4-hydroxyphenyl)-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)

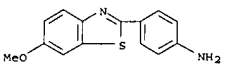


IT **10205-70-6P**, 6-Methoxy-2-(4-methoxyphenyl)benzothiazole
43036-17-5P, 4-(6-Methoxybenzothiazol-2-yl)phenylamine
154558-92-6P, 6-Bromo-2-(4-methoxyphenyl)benzothiazole
440122-93-0P, 4-Methyl-6-methoxy-2-(4-methoxyphenyl)benzothiazole
440122-95-2P, 4-Bromomethyl-6-methoxy-2-(4-methoxyphenyl)benzothiazole **440122-96-3P**, 4-Cyanomethyl-6-methoxy-2-(4-methoxyphenyl)benzothiazole **440122-98-5P**
440122-99-6P, 4-Acetylene-6-methoxy-2-(4-methoxyphenyl)benzothiazole **440123-01-3P**, 4-Methoxycarbonyl-6-methoxy-2-(4-methoxyphenyl)benzothiazole **440123-02-4P**, 4-Carboxy-6-methoxy-2-(4-methoxyphenyl)benzothiazole **440123-33-1P**
440123-35-3P **440123-37-5P** **440123-44-4P**, 4-Cyano-6-methoxy-2-(4-Methoxyphenyl)benzothiazole **440123-45-5P**, 4-Iodo-6-methoxy-2-(4-Methoxyphenyl)benzothiazole **440123-46-6P**, 4-Chloro-6-methoxy-2-(4-Methoxyphenyl)benzothiazole **440123-47-7P**, 6-Methoxy-2-(4-Methoxyphenyl)-4-Trifluoromethyl-1-benzothiazole **440123-49-9P**, 7-Bromo-6-methoxy-2-(4-methoxyphenyl)benzothiazole **440123-50-2P**, 5-Methoxy-2-(4-hydroxyphenyl)benzothiazole-7-carbonitrile
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; prepn. of benzoxazoles and benzothiazoles as selective **ligands** for human .beta.-estrogen receptor (ER-.beta.))

RN 10205-70-6 CAPLUS
CN Benzothiazole, 6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

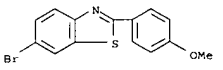


RN 43036-17-5 CAPLUS
CN Benzenamine, 4-(6-methoxy-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

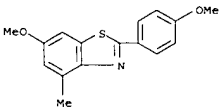


RN 154558-92-6 CAPLUS
CN Benzothiazole, 6-bromo-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

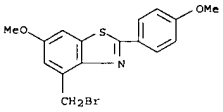
L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



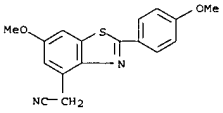
RN 440122-93-0 CAPLUS
CN Benzothiazole, 6-methoxy-2-(4-methoxyphenyl)-4-methyl- (9CI) (CA INDEX NAME)



RN 440122-95-2 CAPLUS
CN Benzothiazole, 4-(bromomethyl)-6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

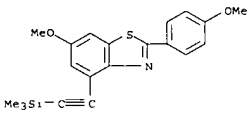


RN 440122-96-3 CAPLUS
CN 4-Benzothiazoleacetonitrile, 6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

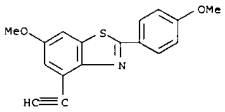


RN 440122-98-5 CAPLUS
CN Benzothiazole, 6-methoxy-2-(4-methoxyphenyl)-4-[(trimethylsilyl)ethynyl]- (9CI) (CA INDEX NAME)

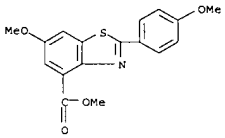
L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 440122-99-6 CAPLUS
CN Benzothiazole, 4-ethynyl-6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

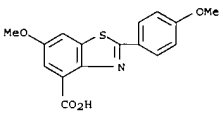


RN 440123-01-3 CAPLUS
CN 4-Benzothiazolecarboxylic acid, 6-methoxy-2-(4-methoxyphenyl)-, methyl ester (9CI) (CA INDEX NAME)

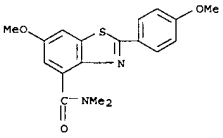


RN 440123-02-4 CAPLUS
CN 4-Benzothiazolecarboxylic acid, 6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

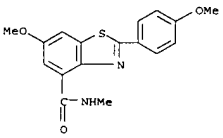
L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 440123-33-1 CAPLUS
CN 4-Benzothiazolecarboxamide, 6-methoxy-2-(4-methoxyphenyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

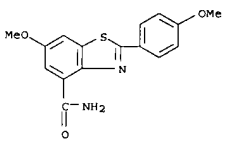


RN 440123-35-3 CAPLUS
CN 4-Benzothiazolecarboxamide, 6-methoxy-2-(4-methoxyphenyl)-N-methyl- (9CI) (CA INDEX NAME)

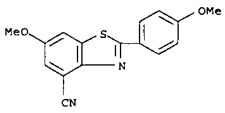


RN 440123-37-5 CAPLUS
CN 4-Benzothiazolecarboxamide, 6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

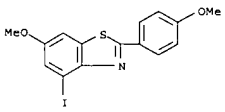
L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



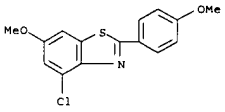
RN 440123-44-4 CAPLUS
CN 4-Benzothiazolecarbonitrile, 6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 440123-45-5 CAPLUS
CN Benzothiazole, 4-iodo-6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

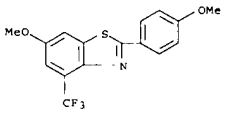


RN 440123-46-6 CAPLUS
CN Benzothiazole, 4-chloro-6-methoxy-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

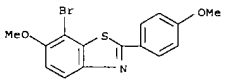


RN 440123-47-7 CAPLUS
CN Benzothiazole, 6-methoxy-2-(4-methoxyphenyl)-4-(trifluoromethyl)- (9CI)

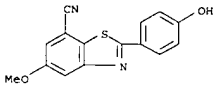
L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
(CA INDEX NAME)



RN 440123 49 9 CAPLUS
CN Benzothiazole, 7 bromo 6 methoxy 2 (4 methoxyphenyl) (9CI) (CA INDEX NAME)

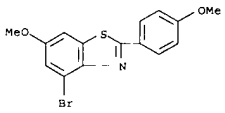


RN 440123 50 2 CAPLUS
CN 7 Benzothiazolecarbonitrile, 2 (4 hydroxyphenyl) 5 methoxy (9CI) (CA INDEX NAME)



IT **440123-32-0**, 4 Bromo 6 methoxy 2 (4 methoxyphenyl)benzothiazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; prepn. of benzoxazoles and benzothiazoles as selective **ligands** for human .beta. estrogen receptor (ER .beta.))
RN 440123 32 0 CAPLUS
CN Benzothiazole, 4 bromo 6 methoxy 2 (4 methoxyphenyl) (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



REFERENCE COUNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L10 ANSWER 3 OF 74 USPATFULL

ACCESSION NUMBER: 2002:266456 USPATFULL
TITLE: 5 cyano 2 aminopyrimidine derivatives
INVENTOR(S): Batchelor, Mark James, Watlington, UNITED KINGDOM
Moffat, David Festus Charles, Maidenhead, UNITED KINGDOM
Davis, Jeremy Martin, Wokingham, UNITED KINGDOM
Hutchings, Martin Clive, Wokingham, UNITED KINGDOM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002147339	A1	20021010
APPLICATION INFO.:	US 2002 151518	A1	20020520 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000 596952, filed on 16 Jun 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1999 14258	19990618

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WOODCOCK WASHBURN LLP, ONE LIBERTY PLACE, 46TH FLOOR, 1650 MARKET STREET, PHILADELPHIA, PA, 19103
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 3033
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Pyrimidines of formula (I) are described ##STR1##

wherein Ar is an optionally substituted aromatic or heteroaromatic group;

R.sup.1 is a hydrogen atom or a straight or branched chain alkyl group;

R.sup.2 is a X.sup.1 R.sup.3 group where X.sup.1 is a direct bond or a linker atom or group, and

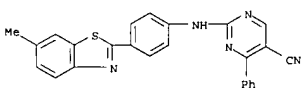
R.sup.3 is an optionally substituted aliphatic, cycloaliphatic, heteroaliphatic, heterocycloaliphatic, aromatic or heteroaromatic group;

and the salts, solvates, hydrates and N-oxides thereof.

The compounds are selective KDR Kinase and/or FGFr Kinase inhibitors and are of use in the prophylaxis and treatment of disease states associated with angiogenesis.

IT **314269-40-4P**
(prepn. of 2 arylamino 5 cyanopyrimidines as inhibitors of KDR kinase and/or FGFr kinase)
RN 314269 40 4 USPATFULL
CN 5 Pyrimidinecarbonitrile, 2 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino] 4 phenyl (9CI) (CA INDEX NAME)

L10 ANSWER 3 OF 74 USPATFULL (Continued)



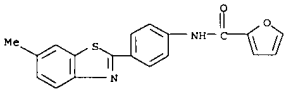
L10 ANSWER 4 OF 74 USPATFULL
ACCESSION NUMBER: 2002:221827 USPATFULL
TITLE: Method for treating glaucoma IIB
INVENTOR(S): Wagle, Dilip, New York, NY, UNITED STATES
Gall, Martin, Morristown, NJ, UNITED STATES
Bell, Stanley C., Narberth, PA, UNITED STATES
LaVoie, Edmond J., Princeton Junction, NJ, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002119970	A1	20020829
APPLICATION INFO.:	US 2001 36856	A1	20011231 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001 296258P	20010606 (60)
	US 2000 259428P	20001229 (60)

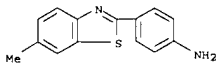
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ALLEN BLOOM, C/O DECHERT, PRINCETON PIKE CORPORATION CENTER, P.O. BOX 5218, PRINCETON, NJ, 08543 5218
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 1262
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided is a method of decreasing intraocular pressure or improving ocular accommodation in an animal, including a human, comprising administering an intraocular pressure decreasing amount or ocular accommodation improving amount of a compound of the formula I or IA, ##STR1##

wherein J is oxygen, sulfur, or N -R.sup.d.
IT **289491-05-0P**
(antiglaucoma agents; prepn. of thiazole derivs. as antiglaucoma agents)
RN 289491-05-0 USPATFULL
CN 2 Furancarboxamide, N-[4-(6-methyl-2 benzothiazolyl]phenyl]- (9CI) (CA INDEX NAME)



IT **92-36-4**, 2-(4 Aminophenyl)-6 methylbenzothiazole
(reactant; prepn. of thiazole derivs. as antiglaucoma agents)
RN 92-36-4 USPATFULL
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

L10 ANSWER 4 OF 74 USPATFULL (Continued)

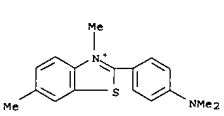


L10 ANSWER 5 OF 74 USPATFULL
ACCESSION NUMBER: 2002:126093 USPATFULL
TITLE: Ink, ink-jet recording method using the same, and photopolymerization initiator
INVENTOR(S): Noguchi, Hiromichi, Tokyo, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002064603	A1	20020530
APPLICATION INFO.:	US 2001 978104	A1	20011017 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1999-294333, filed on 20 Apr 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-119358	19980428
	JP 1998-295452	19981016
	JP 1999-103352	19990409

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER PLAZA, NEW YORK, NY, 10112
NUMBER OF CLAIMS: 81
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1639
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An ink for ink-jet recording contains a coloring agent, a polymerizable oligomer, water, and a photopolymerization initiator having a solubility
in water of 3 percent by weight or more. Another ink for ink-jet recording contains a coloring agent, a polymerizable oligomer having at least two acryloyl groups and a solubility in water of 10 percent by weight or more, a photopolymerization initiator, and water. The specified polymerizable oligomer or photopolymerization initiator reduces bleeding of the ink on recording media.
IT **2390-54-7**, C.I.Basic Yellow 1
(ink-jet inks contg. photopolymn. initiators and recording method)
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)



● Cl

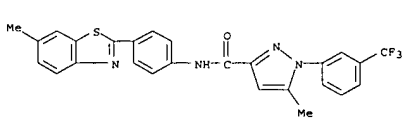
L10 ANSWER 6 OF 74 USPATFULL
ACCESSION NUMBER: 2002:113070 USPATFULL
TITLE: Pyrazole carboxamides useful for the treatment of obesity and other disorders
INVENTOR(S): Kordik, Cheryl P., Lansdale, PA, UNITED STATES
Lovenberg, Timothy W., San Diego, CA, UNITED STATES
Reitz, Allen B., Lansdale, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002058816	A1	20020516
APPLICATION INFO.:	US 2001-898420	A1	20010703 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-563190, filed on 2 May 2000, GRANTED, Pat. No. US 6291476		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-133842P	19990512 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 1589
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Pyrazole carboxamide derivatives of the formula: ##STR1##

which are **ligands** for the neuropeptide Y, subtype 5 receptor, and pharmaceutical compositions containing a pyrazole carboxamide derivative as the active ingredient are described. The pyrazole carboxamides are useful in the treatment of disorders and diseases associated with the NPY receptor subtype Y5.
IT **308337-73-7P**
(prepn. of pyrazole carboxamides for the treatment of obesity and other disorders)
RN 308337-73-7 USPATFULL
CN 1H-Pyrazole-3-carboxamide, 5-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-1-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 7 OF 74 USPATFULL
ACCESSION NUMBER: 2002:27519 USPATFULL
TITLE: Nonpeptide insulin receptor agonists
INVENTOR(S): Sportsman, Richard, Palo Alto, CA, UNITED STATES
Villar, Hugo O., Newark, CA, UNITED STATES
Kauvar, Lawrence M., San Francisco, CA, UNITED STATES
Satyam, Apparao, Fremont, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002016367	A1	20020207
APPLICATION INFO.:	US 2001-961179	A1	20010921 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1997-916088, filed on 21 Aug 1997, PENDING Continuation of Ser. No. US 1997 785855, filed on 20 Jan 1997, GRANTED, Pat. No. US 6073168
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HELLER EHRMAN WHITE & MCAULIFFE LLP, 275 MIDDLEFIELD ROAD, MENLO PARK, CA, 94025 3506
NUMBER OF CLAIMS: 43
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 827
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modulation of the activity of the insulin receptor, enhancement of glucose uptake by cells, and other effects significant in the control and management of diabetes are accomplished using compounds of the formula ##STR1##

wherein each A is independently a proton-accepting substituent;

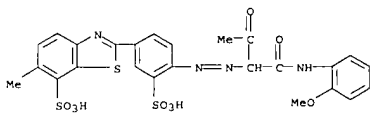
each R is independently a noninterfering substituent;

m is 0 or 1;

n is 0, 1, or 2; and

each linker is independently an isostere of --N.dbd.N-- or of --NHCO--. Compounds in the genus of Formula (1) can also be used for structure activity studies to identify features responsible for the relevant activities.
IT **10190-68-8P**, TER 3938
(modulators of insulin receptor activity, screening, and therapeutic use)
RN 10190-68-8 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2-[4-[[1-[[(2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo]-3-sulfophenyl]-6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 7 OF 74 USPATFULL (Continued)



●2 Na

L10 ANSWER 8 OF 74 USPATFULL
ACCESSION NUMBER: 2002:22561 USPATFULL
TITLE: Coloring resin composition and molded articles
INVENTOR(S): Kawamura, Masayasu, Chuo-Ku, JAPAN
Koide, Masashi, Chuo-Ku, JAPAN
PATENT ASSIGNEE(S): TOYO INK Mfg. Co., Ltd., Chuo-Ku, JAPAN (non-U.S. corporation)

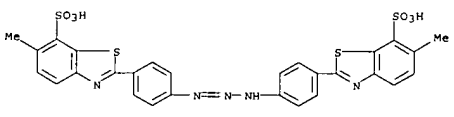
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002013397	A1	20020131
APPLICATION INFO.:	US 2001-880936	A1	20010615 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-186413	20000621

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC, FOURTH FLOOR, 1755 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 903
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a coloring resin composition comprising a dispersing agent, a pigment and a thermoplastic resin, in which the dispersing agent is expressed by the following Formula 1 and the thermoplastic resin is metallocene polyolefin:

C.sub.nH.sub.2n+1(OCH.sub.2CH.sub.2).sub.mOH Formula 1

wherein n is an integer of 1 to 100, and m is an integer of 1 to 100. The composition is useful in coloring molded articles of thermoplastic resin. Colored resin molded articles using the composition are also disclosed.
IT **1829-00-1**, Ferro 42-145A
(Ferro Color 42-145A, pigment; colored polymer compns. with good pigment dispersibility for moldings and fibers)
RN 1829-00-1 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

L10 ANSWER 9 OF 74 USPATFULL
ACCESSION NUMBER: 2002:224623 USPATFULL
TITLE: N-ureidoalkyl-piperidines as modulators of chemokine receptor activity
INVENTOR(S): Ko, Soo S., Hockessin, DE, United States
DeLucca, George V., Wilmington, DE, United States
Duncia, John V., Hockessin, DE, United States
Kim, Ui Tae, Wilmington, DE, United States
Santella, III, Joseph B., Springfield, PA, United States
Wacker, Dean A., Chadds Ford, PA, United States
PATENT ASSIGNEE(S): Bristol-Myers Squibb Pharma Company, Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6444686	B1	20020903
APPLICATION INFO.:	US 1999-466442		19991217 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161221P	19991022 (60)
	US 1998-112717P	19981218 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Chang, Ceila
LEGAL REPRESENTATIVE: VanAtten, Mary K.
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 8817
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present application describes modulators of CCR3 of formula (I): ##STR1##

or pharmaceutically acceptable salt forms thereof, useful for the prevention of asthma and other allergic diseases.
IT **275813-75-7P**
(prepn. of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)
RN 275813-75-7 USPATFULL
CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

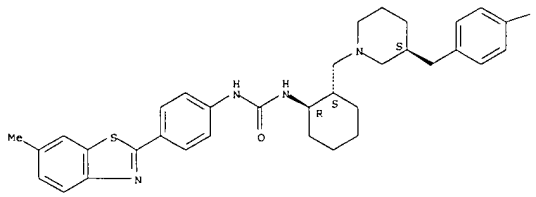
CM 1

CRN 275813-74-6
CMF C34 H39 F N4 O S

Absolute stereochemistry.

L10 ANSWER 9 OF 74 USPATFULL (Continued)

PAGE 1 A



PAGE 1 B

CM 2

CRN 76-05-1
CMF C2 H F3 O2

L10 ANSWER 10 OF 74 USPATFULL

ACCESSION NUMBER: 2002:194618 USPATFULL
TITLE: Ink, ink-jet recording method using the same, and photopolymerization initiator
INVENTOR(S): Noguchi, Hiromichi, Hachiohji, JAPAN
PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6428862	B1	20020806
APPLICATION INFO.:	US 1999 294333		19990420 (9)

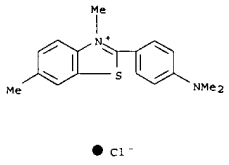
	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-119358	19980428
	JP 1998 295452	19981016
	JP 1999-103352	19990409

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Berman, Susan W.
LEGAL REPRESENTATIVE: Fitzpatrick, Cella, Harper & Scinto
NUMBER OF CLAIMS: 76
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 1660
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An ink for ink jet recording contains a coloring agent, a polymerizable oligomer, water, and a photopolymerization initiator having a solubility in water of 3 percent by weight or more. Another ink for ink-jet recording contains a coloring agent, a polymerizable oligomer having at least two acryloyl groups and a solubility in water of 10 percent by weight or more, a photopolymerization initiator, and water. The specified polymerizable oligomer or photopolymerization initiator reduces bleeding of the ink on recording media.

IT **2390-54-7**, C.I.Basic Yellow 1
(ink-jet inks contg. photopolymn. initiators and recording method)

RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)



L10 ANSWER 10 OF 74 USPATFULL (Continued)

L10 ANSWER 11 OF 74 USPATFULL

ACCESSION NUMBER: 2002:160752 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Craig, Mark V., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Harris, Scott M., Seattle, WA, United States
Kontoyianni, Maria, Seattle, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): Osteoscreen, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6413998	B1	20020702
APPLICATION INFO.:	US 1999-453828		19991202 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 1997-878868, filed on 19 Jun 1997, now patented, Pat. No. US 6008208 Continuation of Ser. No. US 1996-735875, filed on 23 Oct 1996, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-5830P	19951023 (60)

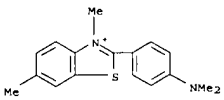
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Powers, Fiona T.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 50 Drawing Figure(s); 50 Drawing Page(s)
LINE COUNT: 1488
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5-15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **2390-54-7 10205-62-6 10360-31-3 190436-44-3 190436-47-6 190436-58-9 190436-62-5**
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)

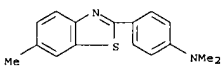
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)

L10 ANSWER 11 OF 74 USPATFULL (Continued)

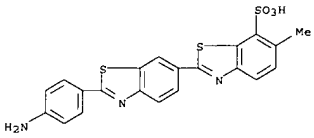


● Cl

RN 10205 62 6 USPATFULL
CN Benzenamine, N,N-dimethyl-4-(6 methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



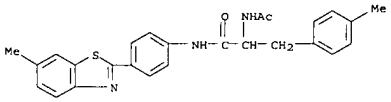
RN 10360-31-3 USPATFULL
CN [2,6'-Bibenzothiazole]-7 sulfonic acid, 2'-(4-aminophenyl)-6 methyl-, monosodium salt (9CI) (CA INDEX NAME)



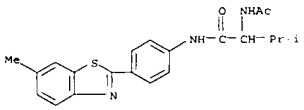
● Na

RN 190436-44-3 USPATFULL
CN Butanamide, 2-(acetylamino)-3-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

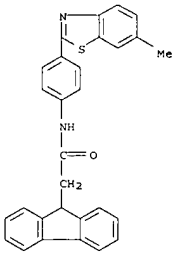
L10 ANSWER 11 OF 74 USPATFULL (Continued)
benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 11 OF 74 USPATFULL (Continued)

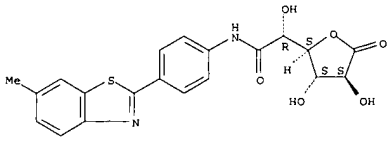


RN 190436-47 6 USPATFULL
CN 9H-Fluorene-9 acetamide, N [4-(6-methyl-2 benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 190436-58-9 USPATFULL
CN L-Galactonic acid, 6-deoxy-6-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]-6-oxo-, .gamma.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190436-62-5 USPATFULL
CN Benzenepropanamide, .alpha.-(acetylamino)-4-methyl-N-[4-(6-methyl-2-

L10 ANSWER 12 OF 74 USPATFULL

ACCESSION NUMBER:	2002:19332 USPATFULL
TITLE:	Compositions and methods for treating bone deficit conditions
INVENTOR(S):	Petrie, Charles, Woodinville, WA, United States Orme, Mark W., Seattle, WA, United States Baindur, Nand, Edmonds, WA, United States Robbins, Kirk G., Renton, WA, United States Kontoyianni, Maria, Seattle, WA, United States Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S):	ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation) Osteoscreen, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6342514	B1	20020129
APPLICATION INFO.:	US 1997-808741		19970228 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-735870, filed on 23 Oct 1996, now abandoned		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Criares, Theodore J.		
LEGAL REPRESENTATIVE:	Morrison & Foerster LLP		
NUMBER OF CLAIMS:	11		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	91 Drawing Figure(s); 91 Drawing Page(s)		
LINE COUNT:	1015		

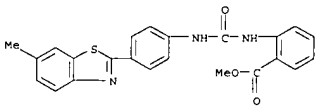
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5-15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **206983-13-3 206983-19-9 206983-20-2 206983-21-3 206983-23-5 206983-25-7 206983-27-9 206983-28-0 206983-29-1 206983-30-4 206983-31-5 206983-32-6 206983-33-7 206983-34-8 206983-35-9**
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)

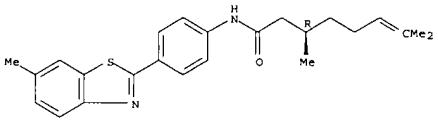
RN 206983-13-3 USPATFULL
CN Benzoic acid, 2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 74 USPATFULL (Continued)

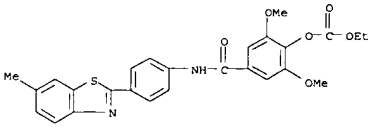


RN 206983 19 9 USPATFULL
CN 6 Octenamide, 3,7 dimethyl N [4 (6 methyl 2 benzothiazolyl)phenyl] , (3R)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

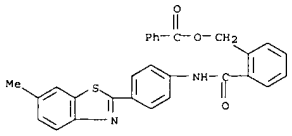


RN 206983 20 2 USPATFULL
CN Carbonic acid, 2,6 dimethoxy 4 [[[4 (6 methyl 2 benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



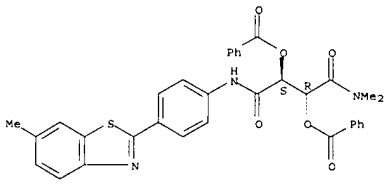
RN 206983-21-3 USPATFULL
CN Benzamide, 2-[(benzoyloxy)methyl]-N [4 (6-methyl 2 benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 74 USPATFULL (Continued)

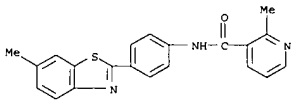


RN 206983 23 5 USPATFULL
CN Butanediamide, 2,3 bis(benzoyloxy) N,N dimethyl N' [4 (6 methyl 2 benzothiazolyl)phenyl] , (2R,3S) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

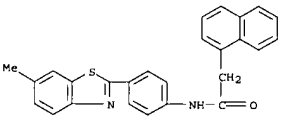


RN 206983 25 7 USPATFULL
CN 3 Pyridinecarboxamide, 2 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



RN 206983-27-9 USPATFULL
CN 1 Naphthaleneacetamide, N [4 (6 methyl 2 benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

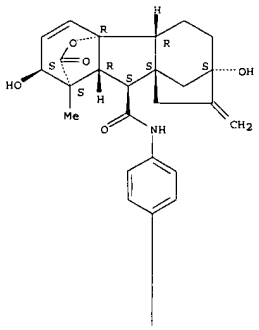
L10 ANSWER 12 OF 74 USPATFULL (Continued)



RN 206983 28 0 USPATFULL
CN Gibb 3 ene 1 carboxylic acid, 2,4a,7-trihydroxy 1-methyl 10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene , .gamma. lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

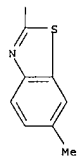
Absolute stereochemistry.

PAGE 1 A

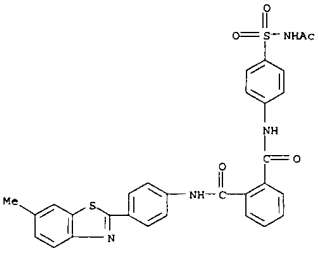


L10 ANSWER 12 OF 74 USPATFULL (Continued)

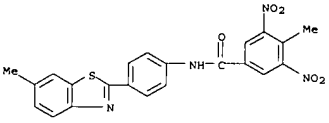
PAGE 2 A



RN 206983 29 1 USPATFULL
CN 1,2-Benzenedicarboxamide, N-[4-[(acetylamino)sulfonyl]phenyl] N'-[4-(6-methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

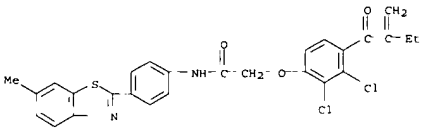


RN 206983 30 4 USPATFULL
CN Benzamide, 4-methyl N-[4 (6 methyl 2 benzothiazolyl)phenyl] 3,5-dinitro- (9CI) (CA INDEX NAME)

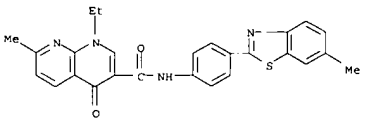


RN 206983-31-5 USPATFULL
CN Acetamide, 2-(2,3 dichloro-4-(2-methylene 1 oxobutyl)phenoxy]-N-[4-(6-methyl-2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 74 USPATFULL (Continued)

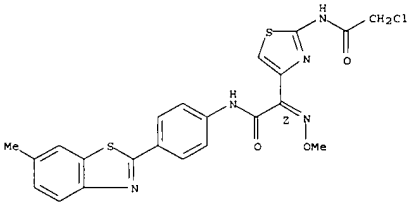


RN 206983 32 6 USPATFULL
CN 1,8 Naphthyridine 3 carboxamide, 1 ethyl 1,4 dihydro 7 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 4 oxo (9CI) (CA INDEX NAME)



RN 206983 33 7 USPATFULL
CN 4 Thiazoleacetamide, 2 [(chloroacetyl)amino] alpha. (methoxyimino) N [4 (6 methyl 2 benzothiazolyl)phenyl] , (.alpha.Z) (9CI) (CA INDEX NAME)

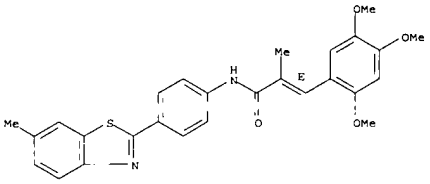
Double bond geometry as shown.



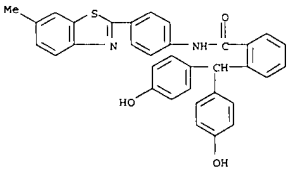
RN 206983 34 8 USPATFULL
CN 2 Propenamide, 2 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 3 (2,4,5 trimethoxyphenyl) , (2E) (9CI) (CA INDEX NAME)

Double bond geometry as shown.

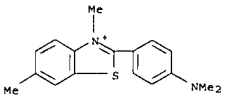
L10 ANSWER 12 OF 74 USPATFULL (Continued)



RN 206983 35 9 USPATFULL
CN Benzamide, 2 [bis(4 hydroxyphenyl)methyl] N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



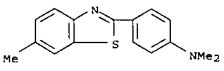
IT **2390-54-7 10205-62-6 10360-31-3 190436-44-3 190436-47-6 190436-58-9 190436-62-5**
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390 54 7 USPATFULL
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)



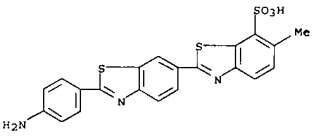
● Cl

L10 ANSWER 12 OF 74 USPATFULL (Continued)

RN 10205 62 6 USPATFULL
CN Benzenamine, N,N dimethyl 4 (6 methyl 2 benzothiazolyl) (9CI) (CA INDEX NAME)

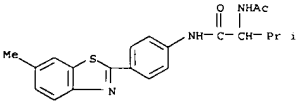


RN 10360 31 3 USPATFULL
CN [2,6' Bibenzothiazole] 7 sulfonic acid, 2' (4 aminophenyl) 6 methyl , monosodium salt (9CI) (CA INDEX NAME)



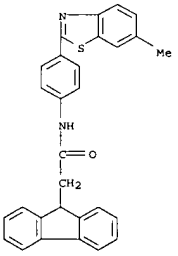
● Na

RN 190436 44 3 USPATFULL
CN Butanamide, 2 (acetylamino) 3 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



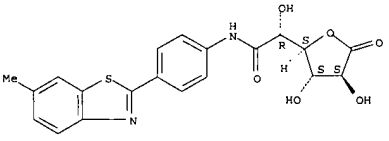
RN 190436 47 6 USPATFULL
CN 9H Fluorene 9 acetamide, N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 12 OF 74 USPATFULL (Continued)

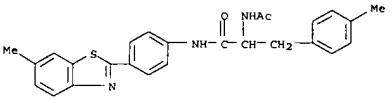


RN 190436 58 9 USPATFULL
CN L Galactonic acid,
6 deoxy 6 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino] 6 oxo , .gamma. lactone (9CI) (CA INDEX NAME)

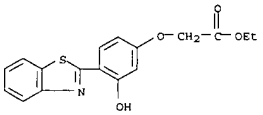
Absolute stereochemistry.



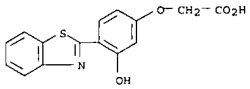
RN 190436 62 5 USPATFULL
CN Benzenepropanamide, .alpha. (acetylamino) 4 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



L10 ANSWER 13 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:340189 CAPLUS
DOCUMENT NUMBER: 137:13148
TITLE: Excited state intramolecular proton transfer and metal
ion complexation of 2 (2' hydroxyphenyl)benzazoles in aqueous solution
AUTHOR(S): Henary, Maged M.; Fahrni, Christoph J.
CORPORATE SOURCE: School of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA, 30332, USA
SOURCE: Journal of Physical Chemistry A (2002), 106(21), 5210-5220
CODEN: JPCAFH; ISSN: 1089-5639
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The excited state intramol. proton transfer (ESIPT) of a series of water-sol. 2-(2' hydroxyphenyl)benzazole derivs. has been studied under physiol. conditions using absorbance and steady-state emission spectroscopy. At neutral pH in the presence of 0.1 M ionic background, the fluorescence properties of these derivs. differ substantially compared to previously reported data in nonaq. solvents. The ESIPT process is disrupted, presumably due to intermol. hydrogen bonding with surrounding water mols. combined with increased stabilization of the trans-rotamer, which cannot undergo the ESIPT process. The emission spectrum of the benzimidazole deriv. depends significantly on the solvent polarity, as revealed by titrns. with Zn(II) in methanol, ethanol, and under physiol. conditions. Inhibition of ESIPT via metal coordination shows a significant wavelength shift together with a substantial ratio increase by a factor of 13.7. Titrn. of the benzoxazole deriv. with Zn(II) yielded a 50-fold increased emission intensity. The fluorescence increase is specific for Zn(II), and with a logK of 3.93 (Kd = 117 .mu.M) the **ligand** would be suitable as a fluorescence probe in a biol. environment to gauge Zn(II) concns. in the range from 10 .mu.M to 1 mM.
IT **433212-92-1P 433212-93-2P**
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST
(Analytical study); PREP (Preparation)
(excited state intramol. proton transfer and metal ion complexation of 2-(2'-hydroxyphenyl)benzazoles in aq. soln.)
RN 433212-92-1 CAPLUS
CN Acetic acid, [4-(2-benzothiazolyl)-3-hydroxyphenoxy] , ethyl ester (9CI) (CA INDEX NAME)

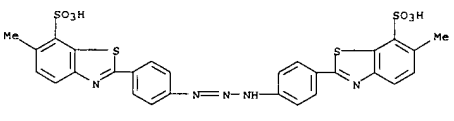


L10 ANSWER 13 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 433212 93 2 CAPLUS
CN Acetic acid, [4-(2-benzothiazolyl) 3 hydroxyphenoxy] (9CI) (CA INDEX NAME)



REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 14 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:390404 CAPLUS
DOCUMENT NUMBER: 137:149197
TITLE: A **chelate** sorbent prepared by the modification of LiChroprep RP-8 with Titan Yellow and its application
AUTHOR(S): Sowa, I.; Kocjan, R.; Swieboda, R.
CORPORATE SOURCE: Department of Inorganic and Analytical Chemistry, Medical School, Lublin, 20-081, Pol.
SOURCE: Hungarian Journal of Industrial Chemistry (2002), 30(1), 27-31
CODEN: HJICAI; ISSN: 0133-0276
PUBLISHER: Veszpremi Egyetem
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The new **chelating** sorbent for metal ions was prepd. by impregnation of chem. modified SiO2 LiChroprep RP-8 with ion pairs composed of cation of Aliquat 336 and anion of Titan Yellow. The hypothetical mol. mechanism of binding this ion pair by the surface of the applied carrier was presented. The sorbent was compared with analogous sorbent with plain SiO2 carrier contg. the same ion pairs. Higher stability of the new sorbent in comparison to that of the plain SiO2 **chelating** sorbent was demonstrated. The sorbent obtained was applied for chromatog. sepns. of some chosen mixts. of metal ions and for addnl. purifn. of aq. solns. of alkali metals from trace amts. of heavy metals.
IT **1829-00-1DP**, Titan Yellow, reaction products with LiChroprep silica and Aliquat 336
RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(prepn. and sepn. of metal ions by modified LiChroprep silica)
RN 1829-00-1 CAPLUS
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 74 USPATFULL
ACCESSION NUMBER: 2001:94936 USPATFULL
TITLE: FLUORESCENT LIQUID CRYSTALLINE CHARGE TRANSFER MATERIALS
INVENTOR(S): HANNA, JUNICHI, YOKOHAMA-SHI, Japan
KOGO, KYOKO, SHINJUKU-KU, Japan
KAFUKU, KOMEI, LAS VEGAS, NV, United States
PATENT ASSIGNEE(S): Junichi Hanna

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001004107	A1	20010621
APPLICATION INFO.:	US 1998-183947	A1	19981102 (9)

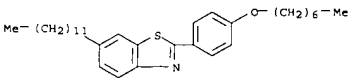
	NUMBER	DATE
PRIORITY INFORMATION:	JP 1997-316654	19971104
	JP 1997-316656	19971104

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PARKHURST & WENDEL, 1431 PRINCE STREET, SUITE 210, ALEXANDRIA, VA, 223142805
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 966
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel charge transfer materials which have both the advantageous properties of amorphous materials such as structural flexibility and uniformity over large areas, and those of crystalline materials such as molecular orientation and which are excellent in charge transferability, thin-film formability, and durability of various types. The liquid crystalline charge transfer materials have the following structure (A) containing a fluorescent skeletal structure Y, and the core Z of a liquid crystal: ##STR1##

in which R.sub.1, which may directly be combined with Z without interposing X.sub.1, represents a saturated or unsaturated, and linear, branched or cyclic hydrocarbon group having 1 to 22 carbon atoms; and X.sub.1 and X.sub.2 represent oxygen atom, sulfur atom, or --CO--, --OCO--, --COO--, --N.dbd.CH--, --CONH--, --NH--, --NHCO-- or --CH.sub.2-- group; or ##STR2##

in which R.sub.1 and R.sub.2, which may directly be combined with Y without interposing X.sub.1 and X.sub.2, represents a saturated or unsaturated, and linear, branched or cyclic hydrocarbon group having 1 to 22 carbon atoms; and X.sub.1 and X.sub.2 represent oxygen atom, sulfur atom, or --CO--, --OCO--, --COO--, --N.dbd.CH--, --CONH--, --NH--, --NHCO-- or --CH.sub.2-- group.
IT **188754-25-8**
(fluorescent liq. cryst. charge transfer materials and devices using them)
RN 188754-25-8 USPATFULL
CN Benzothiazole, 6-dodecyl-2-[4-(heptyloxy)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 15 OF 74 USPATFULL (Continued)



L10 ANSWER 16 OF 74 USPATFULL

ACCESSION NUMBER: 2001:231281 USPATFULL
TITLE: N ureidoalkyl-piperidines as modulators of chemokine receptor activity
INVENTOR(S): Ko, Soo S., 7 Aston Cir., Hockessin, DE, United States 19707
DeLucca, George V., 2703 Marklyn Dr., Wilmington, DE, United States 19810
Duncia, John V., 4 Markham Ct., Hockessin, DE, United States 19707
Santella, III, Joseph B., 250 Lewis Rd., Springfield, PA, United States 19064
Gardner, Daniel S., 104 Paladin Dr., Wilmington, DE, United States 19802

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6331541	B1	20011218
APPLICATION INFO.:	US 1999-465288		19991217 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161222P	19991022 (60)
	US 1998-112717P	19981218 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Raymond, Richard L.
ASSISTANT EXAMINER: Liu, Hong
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
LINE COUNT: 8449
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present application describes modulators of CCR3 of formula (I):
##STR1##

or pharmaceutically acceptable salt forms thereof, useful for the prevention of asthma and other allergic diseases.

IT **275813-75-7P**
(prepn. of N-ureidoalkyl-piperidines as modulators of chemokine receptor activity)
RN 275813-75-7 USPATFULL
CN Urea, N-[(1R,2S)-2-[[(3S)-3-[(4-fluorophenyl)methyl]-1-piperidinyl]methyl]cyclohexyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

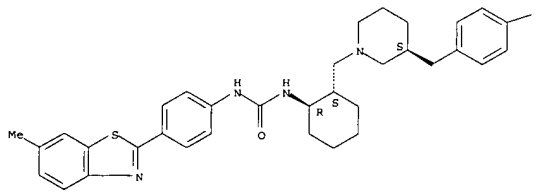
CM 1

CRN 275813-74-6
CMF C34 H39 F N4 O S

Absolute stereochemistry.

L10 ANSWER 16 OF 74 USPATFULL (Continued)

PAGE 1-A



PAGE 1-B

F

CM 2

CRN 76-05-1
CMF C2 H F3 O2

L10 ANSWER 17 OF 74 USPATFULL

ACCESSION NUMBER: 2001:226684 USPATFULL
TITLE: Nonpeptide insulin receptor agonists
INVENTOR(S): Sportsman, Richard, San Francisco, CA, United States
Villar, Hugo O., Newark, CA, United States
Kauvar, Lawrence M., San Francisco, CA, United States
Satyam, Apparao, Freemont, CA, United States
PATENT ASSIGNEE(S): Telik, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6329431	B1	20011211
APPLICATION INFO.:	US 1997-916088		19970821 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1997-784855, filed on 15 Jan 1997		

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Jones, Dwayne C.
LEGAL REPRESENTATIVE: Heller Ehrman White & McAuliffe LLP
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 763
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modulation of the activity of the insulin receptor, enhancement of glucose uptake by cells, and other effects significant in the control and management of diabetes are accomplished using compounds of the formula ##STR1##

wherein each A is independently a proton-accepting substituent;

each R is independently a noninterfering substituent;

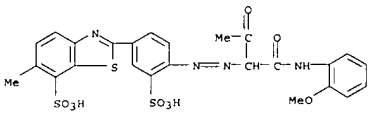
m is 0 or 1;

n is 0, 1, or 2; and

each linker is independently --NHCNHNH--, --NHCOO--, OCOO--, --CH.dbd.CH--, --CH.dbd.N--, --CH.sub.2 CH.sub.2 --, --NHCH.sub.2 --, --OCO-- or --COO--. Compounds in the genus of Formula (1) can also be used for structure activity studies to identify features responsible for the relevant activities.

IT **10190-68-8P**, TER 3938
(modulators of insulin receptor activity, screening, and therapeutic use)
RN 10190-68-8 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2-[4-[[1-[[[(2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo]-3-sulfophenyl]-6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 17 OF 74 USPATFULL (Continued)



●2 Na

L10 ANSWER 18 OF 74 USPATFULL

ACCESSION NUMBER: 2001:158299 USPATFULL
TITLE: Pyrazole carboxamides useful for the treatment of obesity and other disorders
INVENTOR(S): Kordik, Cheryl P., Lansdale, PA, United States
Lovenberg, Timothy W., San Diego, CA, United States
Reitz, Allen B., Lansdale, PA, United States
PATENT ASSIGNEE(S): Ortho-Mcneil Pharmaceutical, Inc., Raritan, NJ, United States (U.S. corporation)

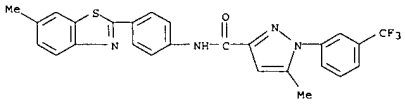
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6291476	B1	20010918
APPLICATION INFO.:	US 2000-563190		20000502 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-133842P	19990512 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Davis, Zinna Northington
LEGAL REPRESENTATIVE: Appollina, Mary
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 1395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Pyrazole carboxamide derivatives of the formula: ##STR1##

which are **ligands** for the neuropeptide Y, subtype 5 receptor, and pharmaceutical compositions containing a pyrazole carboxamide derivative as the active ingredient are described. The pyrazole carboxamides are useful in the treatment of disorders and diseases associated with the NPY receptor subtype Y5.

IT **308337-73-7P**
(prepn. of pyrazole carboxamides for the treatment of obesity and other disorders)
RN 308337-73-7 USPATFULL
CN 1H-Pyrazole-3-carboxamide, 5-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-1-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 19 OF 74 USPATFULL

ACCESSION NUMBER: 2001:97923 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

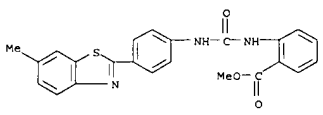
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6251901	B1	20010626
APPLICATION INFO.:	US 1997-806769		19970226 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-736220, filed on 23 Oct 1996, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 91 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 1108
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so 29

as to space the aromatic systems at a distance 1.5-15.ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

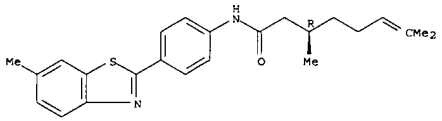
IT **206983-13-3 206983-19-9 206983-20-2 206983-21-3 206983-23-5 206983-25-7 206983-27-9 206983-28-0 206983-29-1 206983-30-4 206983-31-5 206983-32-6 206983-33-7 206983-34-8 206983-35-9**
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)
RN 206983-13-3 USPATFULL
CN Benzoic acid, 2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 19 OF 74 USPATFULL (Continued)

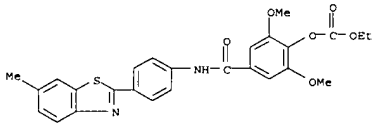


RN 206983-19-9 USPATFULL
CN 6-Octenamide, 3,7-dimethyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

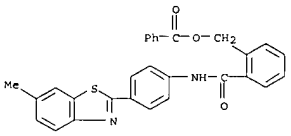


RN 206983-20-2 USPATFULL
CN Carbonic acid, 2,6-dimethoxy-4-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



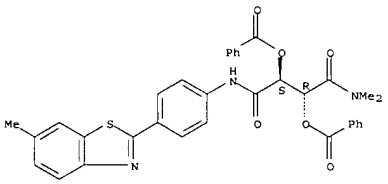
RN 206983-21-3 USPATFULL
CN Benzamide, 2-[(benzoyloxy)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 19 OF 74 USPATFULL (Continued)

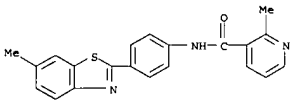


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3-bis(benzoyloxy)-N,N-dimethyl-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

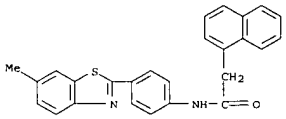


RN 206983-25-7 USPATFULL
CN 3-Pyridinecarboxamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 206983-27-9 USPATFULL
CN 1-Naphthaleneacetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

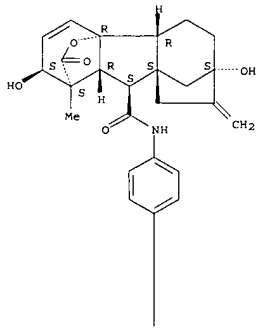
L10 ANSWER 19 OF 74 USPATFULL (Continued)



RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7-trihydroxy-1-methyl-10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

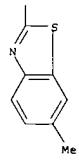
Absolute stereochemistry.

PAGE 1-A

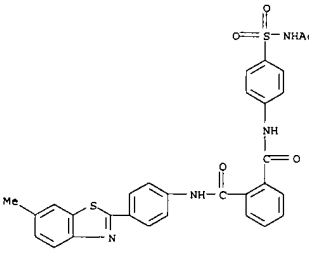


L10 ANSWER 19 OF 74 USPATFULL (Continued)

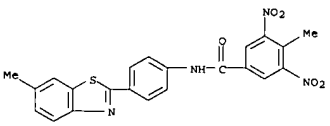
PAGE 2-A



RN 206983-29-1 USPATFULL
CN 1,2-Benzenedicarboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

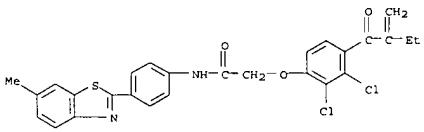


RN 206983-30-4 USPATFULL
CN Benzamide, 4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3,5-dinitro- (9CI) (CA INDEX NAME)

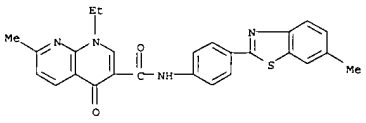


RN 206983-31-5 USPATFULL
CN Acetamide, 2-[2,3-dichloro-4-(2-methylene-1-oxobutyl)phenoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 19 OF 74 USPATFULL (Continued)

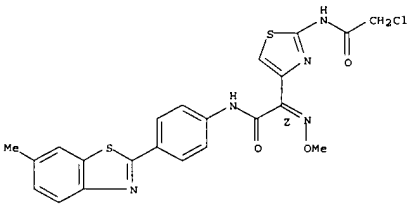


RN 206983-32-6 USPATFULL
CN 1,8-Naphthyridine-3-carboxamide, 1-ethyl-1,4-dihydro-7-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)



RN 206983-33-7 USPATFULL
CN 4-Thiazoleacetamide, 2-[(chloroacetyl)amino]-.alpha.-(methoxyimino)-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (.alpha.Z)- (9CI) (CA INDEX NAME)

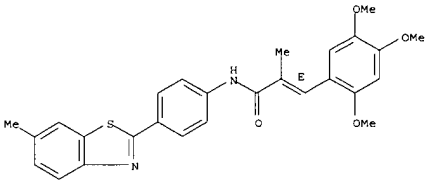
Double bond geometry as shown.



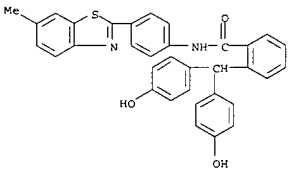
RN 206983-34-8 USPATFULL
CN 2-Propenamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3-(2,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L10 ANSWER 19 OF 74 USPATFULL (Continued)

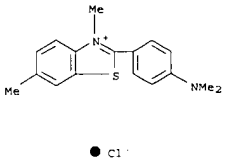


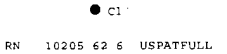
RN 206983-35-9 USPATFULL
CN Benzamide, 2-[bis(4-hydroxyphenyl)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



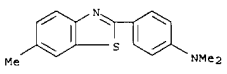
IT **2390-54-7 10205-62-6 10360-31-3 190436-44-3 190436-47-6 190436-58-9 190436-62-5**
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI) (CA INDEX NAME)

L10 ANSWER 19 OF 74 USPATFULL (Continued)

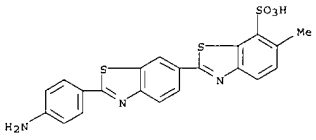




RN 10205-62-6 USPATFULL
CN Benzenamine, N,N-dimethyl-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

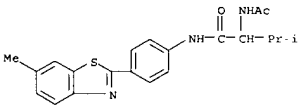


RN 10360-31-3 USPATFULL
CN [2,6'-Bibenzothiazole]-7-sulfonic acid, 2'-(4-aminophenyl)-6-methyl-, monosodium salt (9CI) (CA INDEX NAME)

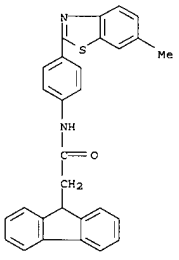


RN 190436-44-3 USPATFULL
CN Butanamide, 2-(acetylamino)-3-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 19 OF 74 USPATFULL (Continued)

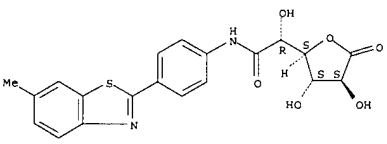


RN 190436-47-6 USPATFULL
CN 9H-Fluorene-9-acetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



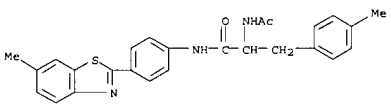
RN 190436-58-9 USPATFULL
CN L-Galactonic acid, 6-deoxy-6-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]-6-oxo-, .gamma. lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190436-62-5 USPATFULL
CN Benzenepropanamide, .alpha.-(acetylamino)-4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 19 OF 74 USPATFULL (Continued)

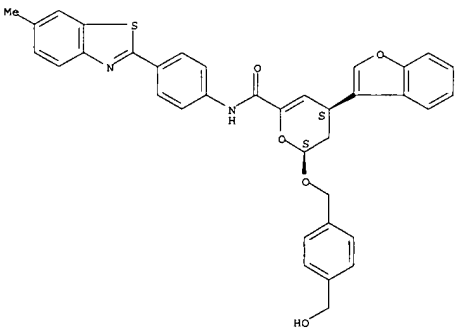


L10 ANSWER 20 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:112577 CAPLUS
DOCUMENT NUMBER: 136:150765
TITLE: Decoding products of diversity pathways from stock solutions derived from single polymeric macrobeads
AUTHOR(S): Blackwell, Helen E.; Perez, Lucy; Schreiber, Stuart L.
CORPORATE SOURCE: Howard Hughes Medical Institute, Harvard Institute of Chemistry and Cell Biology, Harvard University, Cambridge, MA, 02138, USA
SOURCE: Angewandte Chemie, International Edition (2001), 40(18), 3421-3425
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A combinatorial library of nonracemic dihydropyrancarboxamides such as I (prepd. on solid phase by the enantioselective Diels-Alder cycloaddn. of resin-bound vinyl ethers with allyl .beta.,.gamma.-unsatd.-.alpha. ketoesters in the presence of nonracemic bisoxazoline **ligands** and copper (II) triflate) using a novel tagging technique for the labeling and identification of members of combinatorial libraries. Chloroarom. diazoketones II (n = 1, 7, 14; R = H, Cl) were used as tagging agents to identify the sequence of reactions to which a resin bead had been subjected; treatment of a resin bead with II in the presence of dirhodium tetrakis(triphenylacetate) yielded a polystyrene resin contg. a fraction of chloroaralkyl cycloheptatriene moieties (formed by ring expansion of the polystyrene Ph groups). Oxidative cleavage of the tags with ceric ammonium nitrate liberated the chloroarom. portion of the tags; treatment of the tags with N,O-bis(trimethylsilyl)acetamide and gas chromatog. yielded masses correspanding to the sequence of reactions to which beads were subjected and thus their identities. The tags could be decoded either directly from a bead before compd. cleavage, from a bead after compd. cleavage, or from compd. stock solns. (generated by compd. cleavage and dissoln. of a fraction of the liberated compds. in THF/H2O). Decoding compd. stock solns. was the most effective method of identifying library members; compds. were identified by tag cleavage of solns. contg. 1 or 5% of the compd. cleaved from a single bead. Stock solns. were decoded most effectively because a fraction of the library member on a given bead was tagged with the chloroarom. diazoketone in addn. to the polystyrene resin (due to the high-loading resin used) and because oxidative cleavage of the tags with CAN proceeded more readily in soln. than on solid support. A sublibrary of 108 beads chosen from the larger combinatorial library was decoded by this procedure; of the 108 compds., 107 were successfully decoded. Four different synthetic pathways were found to be compatible with the diazoketone tagging methodol. (no data). The use of stock solns. for the decoding and deconvolution of combinatorial libraries is amenable to robotic methods for combinatorial library synthesis and testing, minimizes the storage requirements for combinatorial libraries, and allows for simpler and faster compd. identification.

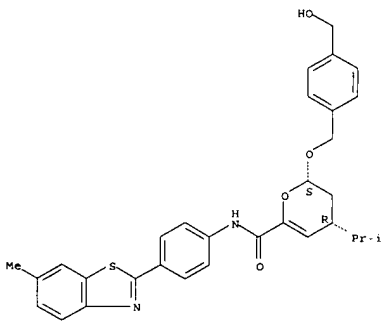
IT **394253-01-1P 394253-02-2P 394253-51-1P**

L10 ANSWER 20 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
Absolute stereochemistry.



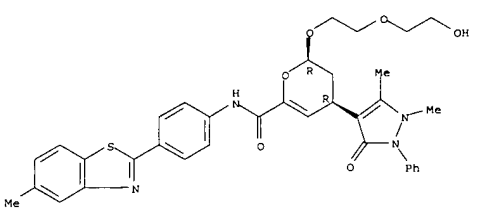
RN 394253-52-2 CAPLUS
CN 2H-Pyran-6-carboxamide, 3,4-dihydro-2-[[4-(hydroxymethyl)phenyl]methoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-4-(1-methylethyl)-, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



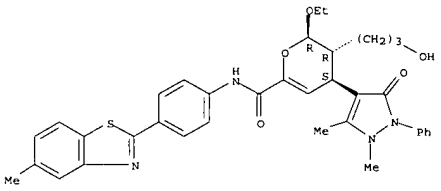
L10 ANSWER 20 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
394253-52-2P
RL: CPN (Combinatorial preparation); CMBI (Combinatorial study); PREP (Preparation)
(chloroarom. diazoketone tags and stock solns. in prepn. and decoding and deconvolution of combinatorial libraries on macrobeads and use in prepn. of nonracemic dihydropyrancarboxamide combinatorial library)
RN 394253-01-1 CAPLUS
CN 2H Pyran-6-carboxamide, 4-(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)-3,4-dihydro-2-[2-(2 hydroxyethoxy)ethoxy]-N-[4-(5-methyl-2-benzothiazolyl)phenyl]-, (2R,4R) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



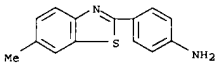
RN 394253-02-2 CAPLUS
CN 2H-Pyran-6-carboxamide, 4-(2,3-dihydro-1,5-dimethyl-3-oxo-2-phenyl-1H-pyrazol-4-yl)-2-ethoxy-3,4-dihydro-3-(3-hydroxypropyl)-N-[4-(5-methyl-2-benzothiazolyl)phenyl]-, (2R,3R,4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 394253-51-1 CAPLUS
CN 2H-Pyran-6-carboxamide, 4-(3-benzofuranyl)-3,4-dihydro-2-[[4-(hydroxymethyl)phenyl]methoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2S,4S)- (9CI) (CA INDEX NAME)

L10 ANSWER 20 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
IT **92-36-4**
RL: CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); RACT (Reactant or reagent)
(chloroarom. diazoketone tags and stock solns. in prepn. and decoding and deconvolution of combinatorial libraries on macrobeads and use in prepn. of nonracemic dihydropyrancarboxamide combinatorial library)
RN 92-36-4 CAPLUS
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



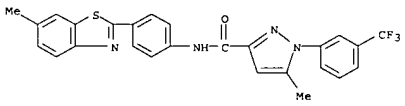
L10 ANSWER 21 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2001:468803 BIOSIS
DOCUMENT NUMBER: PREV200100468803
TITLE: Antitumor benzothiazole: A novel **ligand** for aryl hydrocarbon receptor (AhR.
AUTHOR(S): Loaiza-Perez, Andrea (1); Singh, Sheo; Bell, David; Trapani, Valentina; Trepel, Jane; Roy, Krishnendu; Bradshaw, Tracey; Stevens, Malcolm; Sausville, Edward
CORPORATE SOURCE: (1) National Cancer Institute, Betheada, MD USA
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (March, 2001) Vol. 42, pp. 511. print.
Meeting Info.: 92nd Annual Meeting of the American Association for Cancer Research New Orleans, LA, USA March 24-28, 2001
ISSN: 0197 016X.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L10 ANSWER 22 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:824248 CAPLUS
DOCUMENT NUMBER: 134:4933
TITLE: Preparation of pyrazole carboxamides for the treatment
of obesity and other disorders
INVENTOR(S): Kordik, Cheryl P.; Lovenberg, Timothy W.; Reitz, Allen
B.
PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069849	A1	20001123	WO 2000-US11903	20000502
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6291476	B1	20010918	US 2000-563190	20000502
EP 1177188	A1	20020206	EP 2000-928712	20000502
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002058816	A1	20020516	US 2001-898420	20010703

PRIORITY APPLN. INFO.: US 1999-133842P P 19990512
US 2000-563190 A1 20000502
WO 2000-US11903 W 20000502
OTHER SOURCE(S): MARPAT 134:4933
AB The title compds. [I; R1 = alkyl, aryl, aralkyl, etc.; R2 = dialkylaminoalkyl, (un)substituted (heteroaryl)alkyl, (un)substituted (heterocycloalkyl)alkyl, etc.; R3 = H, halo, alkyl, etc.; R4 = halo, alkyl, aralkyl, etc.; R5 = H, alkyl] which are **ligands** for the neuropeptide Y, subtype 5 receptor, and therefore useful in the treatment of disorders and diseases assocd. with the NPY receptor subtype Y5, were prepd. and formulated. E.g., a 3-step synthesis of the pyrazole I [R1 = 3-F3CC6H4; R2 = 5-isoquinolinyl; R3, R5 = H; R4 = Me] which showed IC50 of
80 nM against human NPY Y5 binding, was given.
IT **308337-73-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of pyrazole carboxamides for the treatment of obesity and other
disorders)
RN 308337-73-7 CAPLUS

L10 ANSWER 22 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN 1H-Pyrazole-3-carboxamide, 5-methyl-N-[4-(6-methyl 2 benzothiazolyl)phenyl]-1-[3-(trifluoromethyl)phenyl] (9CI) (CA INDEX NAME)

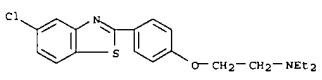


REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 23 OF 74 USPATFULL
ACCESSION NUMBER: 2000:174665 USPATFULL
TITLE: Peripherally active anti hyperalgesic opiates
INVENTOR(S): Yaksh, Tony L., San Diego, CA, United States
PATENT ASSIGNEE(S): Regents of the Univ. of California, Oakland, CA, United
States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6166039		20001226
APPLICATION INFO.:	US 1998-199873		19981124 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-528510, filed on 12 Sep 1995, now patented, Pat. No. US 5849761
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Spivack, Phyllis G.
LEGAL REPRESENTATIVE: Seidman, Stephanie L.Heller Ehrman White and McAuliffe LLP
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
LINE COUNT: 3758
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods for treatment of peripheral hyperalgesia are provided, comprising administering compositions containing an anti-hyperalgesia effective amount of one or more compounds that directly or indirectly interact with peripheral opiate receptors, but that do not, upon topical
or local administration, elicit central nervous system side effects. The
anti-diarrheal compound 4-(.rho.-chlorophenyl)-4-hydroxy-N-N-dimethyl-.alpha.,.alpha.-diphenyl-1-piperidinebutyramide hydrochloride is preferred for use in the methods.
IT **15599-36-7**, Halethazole
(peripherally active anti-hyperalgesic opiates)
RN 15599-36-7 USPATFULL
CN Ethanamine, 2-[4-(5-chloro-2-benzothiazolyl)phenoxy]-N,N-diethyl- (9CI) (CA INDEX NAME)



L10 ANSWER 24 OF 74 USPATFULL
ACCESSION NUMBER: 2000:161028 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6153631		20001128
APPLICATION INFO.:	US 1997 806768		19970226 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996 736221, filed on 23 Oct 1996, now abandoned		

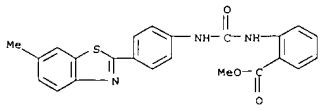
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fay, Zohreh
LEGAL REPRESENTATIVE: Morrison & Foerster, LLP
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 91 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 997
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5 15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **206983-13-3 206983-19-9 206983-20-2 206983-21-3 206983-23-5 206983-25-7 206983-27-9 206983-28-0 206983-29-1 206983-30-4 206983-31-5 206983-32-6 206983-33-7 206983-34-8 206983-35-9**
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)

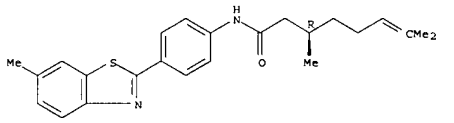
RN 206983-13-3 USPATFULL
CN Benzoic acid, 2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 24 OF 74 USPATFULL (Continued)

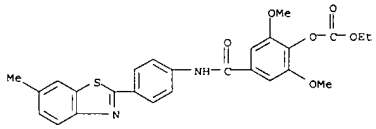


RN 206983-19-9 USPATFULL
CN 6-Octenamide, 3,7-dimethyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

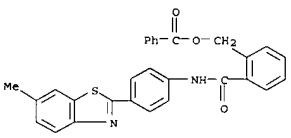


RN 206983-20-2 USPATFULL
CN Carbonic acid, 2,6-dimethoxy-4-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



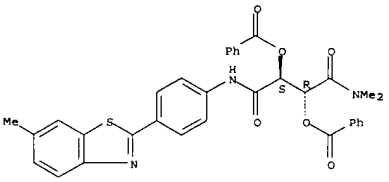
RN 206983-21-3 USPATFULL
CN Benzamide, 2-[(benzoyloxy)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 24 OF 74 USPATFULL (Continued)

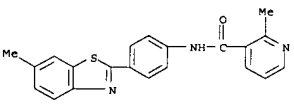


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3-bis(benzoyloxy)-N,N-dimethyl-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

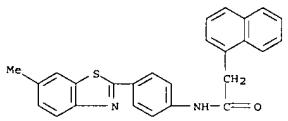


RN 206983-25-7 USPATFULL
CN 3-Pyridinecarboxamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 206983-27-9 USPATFULL
CN 1-Naphthaleneacetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

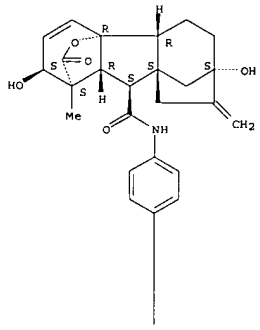
L10 ANSWER 24 OF 74 USPATFULL (Continued)



RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7-trihydroxy-1-methyl-10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

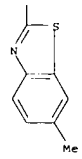
Absolute stereochemistry.

PAGE 1-A

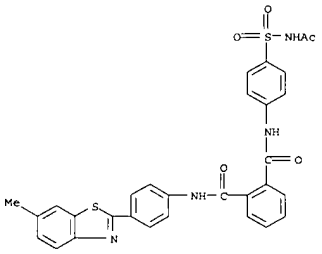


L10 ANSWER 24 OF 74 USPATFULL (Continued)

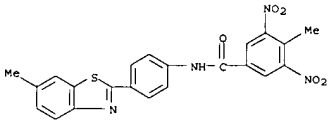
PAGE 2 A



RN 206983 29 1 USPATFULL
CN 1,2 Benzenedicarboxamide, N [4 [(acetylamino)sulfonyl]phenyl] N' [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

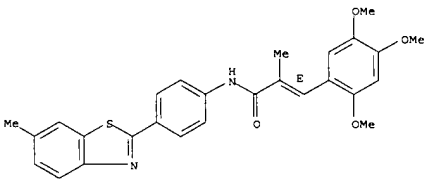


RN 206983 30 4 USPATFULL
CN Benzamide, 4 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 3,5 dinitro (9CI) (CA INDEX NAME)

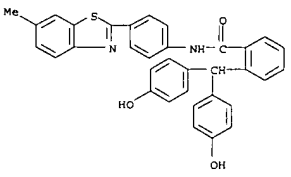


L10 ANSWER 24 OF 74 USPATFULL (Continued)
trimethoxyphenyl) , (2E) (9CI) (CA INDEX NAME)

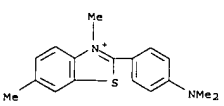
Double bond geometry as shown.



RN 206983 35 9 USPATFULL
CN Benzamide, 2 [bis(4 hydroxyphenyl)methyl] N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

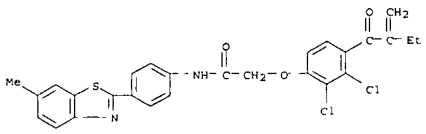


IT **2390-54-7 10205-62-6 10360-31-3 190436-44-3 190436-47-6 190436-58-9 190436-62-5**
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390 54 7 USPATFULL
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)

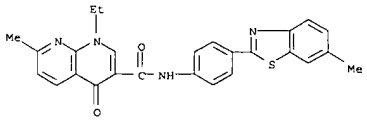


● Cl

L10 ANSWER 24 OF 74 USPATFULL (Continued)
RN 206983 31 5 USPATFULL
CN Acetamide, 2 [2,3 dichloro 4 (2 methylene 1 oxobutyl)phenoxy] N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

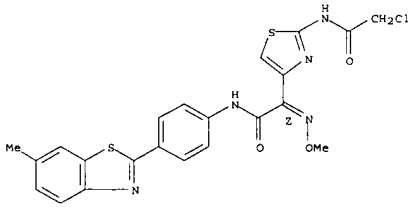


RN 206983 32 6 USPATFULL
CN 1,8 Naphthyridine 3 carboxamide, 1 ethyl 1,4 dihydro 7 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 4 oxo (9CI) (CA INDEX NAME)



RN 206983 33 7 USPATFULL
CN 4 Thiazoleacetamide, 2 [(chloroacetyl)amino] .alpha. (methoxyimino) N [4 (6 methyl 2 benzothiazolyl)phenyl] , (.alpha.Z) (9CI) (CA INDEX NAME)

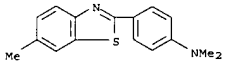
Double bond geometry as shown.



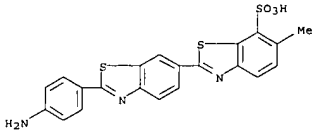
RN 206983 34 8 USPATFULL
CN 2 Propenamide, 2 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 3 (2,4,5

L10 ANSWER 24 OF 74 USPATFULL (Continued)

RN 10205 62 6 USPATFULL
CN Benzenamine, N,N dimethyl 4 (6 methyl 2 benzothiazolyl) (9CI) (CA INDEX NAME)

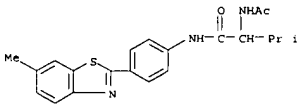


RN 10360 31 3 USPATFULL
CN [2,6' Bibenzothiazole] 7 sulfonic acid, 2' (4 aminophenyl) 6 methyl , monosodium salt (9CI) (CA INDEX NAME)



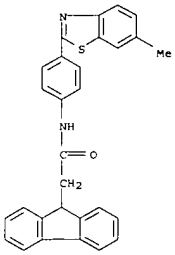
● Na

RN 190436 44 3 USPATFULL
CN Butanamide, 2 (acetylamino) 3 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



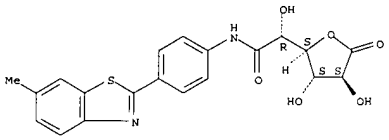
RN 190436 47 6 USPATFULL
CN 9H Fluorene 9 acetamide, N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 24 OF 74 USPATFULL (Continued)

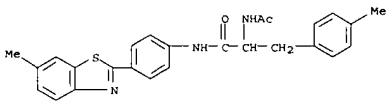


RN 190436-58-9 USPATFULL
CN L-Galactonic acid, 6-deoxy-6-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]-, .gamma.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.

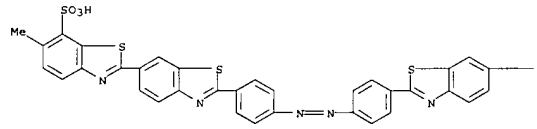


RN 190436-62-5 USPATFULL
CN Benzenepropanamide, .alpha.-(acetylamino)-4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



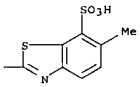
L10 ANSWER 25 OF 74 USPATFULL (Continued)

PAGE 1-A



●2 Na

PAGE 1-B



L10 ANSWER 25 OF 74 USPATFULL

ACCESSION NUMBER: 2000:74315 USPATFULL
TITLE: Compound for inhibiting HIV infectivity
INVENTOR(S): Singh, Shyam K., Natick, MA, United States
Patch, Raymond J., Framingham, MA, United States
Pallai, Peter V., Westwood, MA, United States
Neidhardt, Edith A., Boxford, MA, United States
Palace, Gerard P., Framingham, MA, United States
Willis, Kevin J., Newton, MA, United States
Sampo, Theresa M., Watertown, MA, United States
McDonald, Kevin W., Merrimack, NH, United States
Shi, Zhan, Waltham, MA, United States
PATENT ASSIGNEE(S): Procept, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6075050		20000613
APPLICATION INFO.:	US 1995 467728		19950606 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994 245619, filed on 19 May 1994, now patented, Pat. No. US 5614559 which is a continuation-in-part of Ser. No. US 1993-156443, filed on 23 Nov 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: O'Sullivan, Peter
LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds, P.C.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 33 Drawing Figure(s); 18 Drawing Page(s)
LINE COUNT: 1719
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention pertains to the discovery that condensation polymers of an aldehyde and aromatic sulfonic acids and fractions thereof, such as formaldehyde naphthalenesulfonic acid condensation polymers, can abrogate HIV gp120 binding to CD4, as demonstrated in CD4/gp120 binding assays. In addition to gp120 binding inhibition, the compounds have been shown to inhibit HIV-induced syncytia formation and infectivity of CD4+ cells. The use of this compound has been shown to be non-cytotoxic and non-inhibitory to antigen induced T lymphocyte proliferation. Based on these findings, these compounds can be used as a therapeutic agent for the treatment of acquired immunodeficiency syndrome (AIDS), as well as AIDS related complex (ARC), AIDS-related dementia and non-symptomatic HIV infection. The compounds can also be used to treat blood preparations.

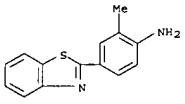
IT **6537-66-2**, Direct yellow 29
(aldehyde-arom. sulfonic acid condensation polymers for inhibiting HIV infectivity)
RN 6537-66-2 USPATFULL
CN [2,6'-Bibenzothiazole]-7-sulfonic acid, 2',2'''-(azodi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 26 OF 74 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:14548 CAPLUS
DOCUMENT NUMBER: 135:200287
TITLE: Combined effect of pH control with surfactants or complexants on 2-(4''-amino-3''-methylphenyl) benzothiazole (NSC-674495) solubilization
AUTHOR(S): El-Sayed, Mohamed M.; Tabibi, S. Esmail; Yalkowsky, Samuel H.
CORPORATE SOURCE: Dept. of Pharmaceutics, Faculty of Pharmacy, Suez Canal University, Ismailia, Egypt
SOURCE: Bulletin of the Faculty of Pharmacy (Cairo University) (2000), 38(2), 51-56
CODEN: BFPHA8; ISSN: 1110-0931
PUBLISHER: Cairo University, Faculty of Pharmacy
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Complexation, micellization, and pH control are among the most common approaches used for increasing drug soly. While each of these approaches can be effective alone, the combination of pH control with either of the others produces a synergistic effect. The 2-(4-amino-3-methylphenyl) deriv. of benzothiazole (AMBP) is currently under development for cancer treatment. It has an aq. soly. of only 0.54 .mu.g/mL at neutral pH. Its low basic pKa (.apprx.2.8) provides a soly. of only 44 .mu.g/mL at pH 1.1. However the use of either a surfactant or a complexing **ligand** in combination with a low pH enables a significantly greater increase in soly., on the order of milligrams per mL.

IT **178804-04-1**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combined effects of pH control with surfactants or complexants NSC-674495 solubilization)
RN 178804-04-1 CAPLUS
CN Benzenamine, 4-(2-benzothiazolyl)-2-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 27 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:339497 CAPLUS
DOCUMENT NUMBER: 130:359611
TITLE: Fluorescent liquid crystalline charge transfer materials
INVENTOR(S): Hanna, Junichi; Kogo, Kyoko; Kafuku, Komei
PATENT ASSIGNEE(S): Dai Nippon Printing Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 67 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

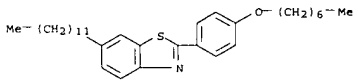
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 915144	A1	19990512	EP 1998 120668	19981104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11144525	A2	19990528	JP 1997 316654	19971104
JP 11144526	A2	19990528	JP 1997 316656	19971104
US 2001004107	A1	20010621	US 1998 183947	19981102

PRIORITY APPLN. INFO.: JP 1997 316654 A 19971104
JP 1997 316656 A 19971104
OTHER SOURCE(S): MARPAT 130:359611

AB Liq. crystal charge transfer materials are described by the general formulas R1 X1 Z X2 Y or R2-X1 Z X2-R3 (R1, which may directly be combined with Z without interposing X1, and R2 and R3, which may directly be combined with Y without interposing X1and/or X2, = (un)satd. linear, branched, or cyclic C1-22 hydrocarbon group; and X1 and X2 = O, S, CO, OCO, COO, N:CH, CONH, NH, NHCO or CH2 groups; Y = a fluorescent group which may be liq. cryst., and Z = a liq. crystal core). Y may be selected from radicals of metal **chelate** compds., polycyclically condensed or conjugated arom. hydrocarbons, diphenylethylene derivs., triphenylamine derivs., diaminocarbazole derivs., bistyryl derivs., benzothiazole derivs., benzoxazole derivs., arom. diamine derivs., quinacridone compds., perylene compds., oxadiazole derivs., coumarin compds., and anthracene derivs. Electroluminescent elements, optical sensors, photoconductors, displays, spatial optical modulators, and thin film transistors employing the materials are also described.

IT **188754-25-8**
RL: DEV (Device component use); USES (Uses)
(fluorescent liq. cryst. charge transfer materials and devices using them)
RN 188754 25 8 CAPLUS
CN Benzothiazole, 6 dodecyl 2-[4-(heptyloxy)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 27 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 28 OF 74 USPATFULL
ACCESSION NUMBER: 1999:170600 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Harris, Scott M., Seattle, WA, United States
Kontoyianni, Maria, Seattle, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): OsteoScreen, Inc., San Antonio, TX, United States (U.S. corporation)
ZymoGenetics Corporation, Seattle, WA, United States (U.S. corporation)

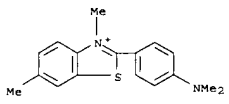
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6008208		19991228
APPLICATION INFO.:	US 1997-878868		19970619 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-735875, filed on 23 Oct 1996, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Powers, Fiona T.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 50 Drawing Figure(s); 50 Drawing Page(s)
LINE COUNT: 1364
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

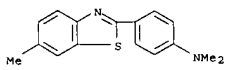
AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5-15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **2390-54-7 10205-62-6 10360-31-3**
190436-44-3 190436-47-6 190436-58-9
190436-62-5
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)

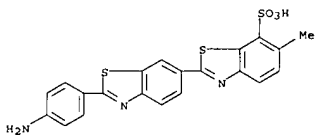
L10 ANSWER 28 OF 74 USPATFULL (Continued)



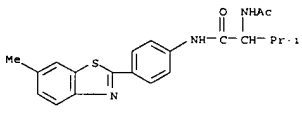
RN 10205 62-6 USPATFULL
CN Benzenamine, N,N-dimethyl-4-(6 methyl-2 benzothiazolyl)- (9CI) (CA INDEX NAME)



RN 10360 31 3 USPATFULL
CN [2,6' Bibenzothiazole) 7 sulfonic acid, 2' [4 aminophenyl) 6-methyl , monosodium salt (9CI) (CA INDEX NAME)

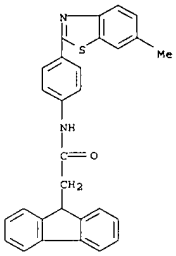


RN 190436 44-3 USPATFULL
CN Butanamide, 2-(acetylamino)-3 methyl N [4 (6 methyl 2-benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



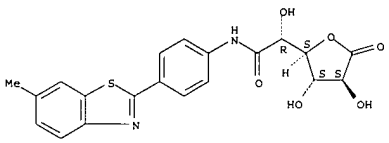
L10 ANSWER 28 OF 74 USPATFULL (Continued)

RN 190436-47-6 USPATFULL
CN 9H-Fluorene-9-acetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



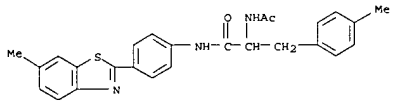
RN 190436-58-9 USPATFULL
CN L-Galactonic acid, 6-deoxy-6-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]-6-oxo-, .gamma.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190436-62-5 USPATFULL
CN Benzenepropanamide, .alpha.-(acetylamino)-4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 28 OF 74 USPATFULL (Continued)



L10 ANSWER 29 OF 74 USPATFULL

ACCESSION NUMBER: 1999:155741 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Kontoyianni, Maria, Seattle, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
Osteoscreen, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5994358		19991130
APPLICATION INFO.:	US 1997-808744		19970228 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-736319, filed on 23 Oct 1996, now abandoned		

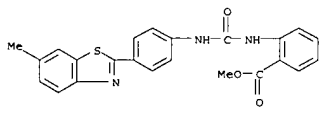
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Morrison & Foerster, LLP
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 973
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5-15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **206983-13-3 206983-19-9 206983-20-2 206983-21-3 206983-23-5 206983-25-7 206983-27-9 206983-28-0 206983-29-1 206983-30-4 206983-31-5 206983-32-6 206983-33-7 206983-34-8 206983-35-9**
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)

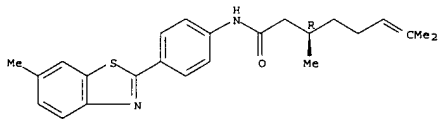
RN 206983-13-3 USPATFULL
CN Benzoic acid, 2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 29 OF 74 USPATFULL (Continued)

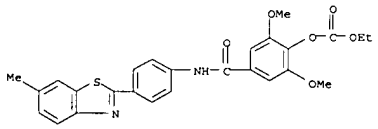


RN 206983-19-9 USPATFULL
CN 6-Octenamide, 3,7-dimethyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

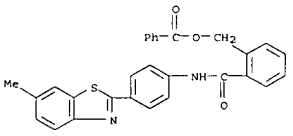


RN 206983-20-2 USPATFULL
CN Carbonic acid, 2,6-dimethoxy-4-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



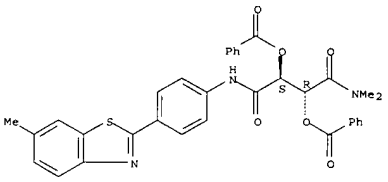
RN 206983-21-3 USPATFULL
CN Benzamide, 2-[(benzoyloxy)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 29 OF 74 USPATFULL (Continued)

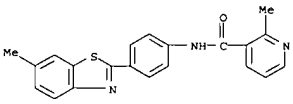


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3-bis(benzoyloxy)-N,N'-dimethyl-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

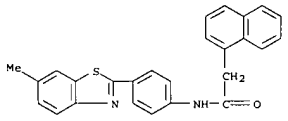


RN 206983-25-7 USPATFULL
CN 3-Pyridinecarboxamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 206983-27-9 USPATFULL
CN 1-Naphthaleneacetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

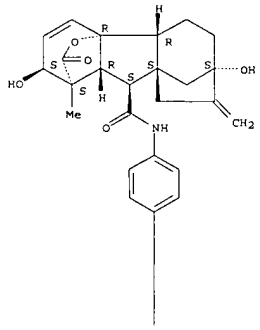
L10 ANSWER 29 OF 74 USPATFULL (Continued)



RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7-trihydroxy-1-methyl-10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

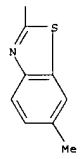
Absolute stereochemistry.

PAGE 1-A

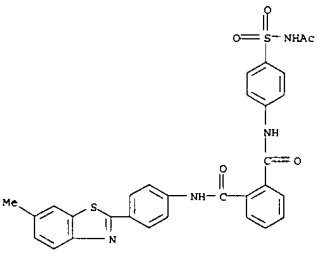


L10 ANSWER 29 OF 74 USPATFULL (Continued)

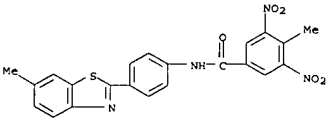
PAGE 2-A



RN 206983-29-1 USPATFULL
CN 1,2-Benzenedicarboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

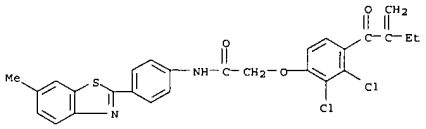


RN 206983-30-4 USPATFULL
CN Benzamide, 4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3,5-dinitro- (9CI) (CA INDEX NAME)

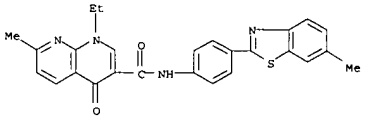


RN 206983-31-5 USPATFULL
CN Acetamide, 2-[2,3-dichloro-4-(2-methylene-1-oxobutyl)phenoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 29 OF 74 USPATFULL (Continued)

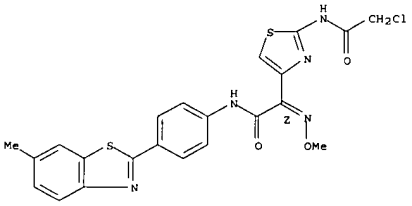


RN 206983-32-6 USPATFULL
CN 1,8-Naphthyridine-3-carboxamide, 1-ethyl-1,4-dihydro-7-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)



RN 206983-33-7 USPATFULL
CN 4-Thiazoleacetamide, 2-[(chloroacetyl)amino]-.alpha.-(methoxyimino)-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (.alpha.Z)- (9CI) (CA INDEX NAME)

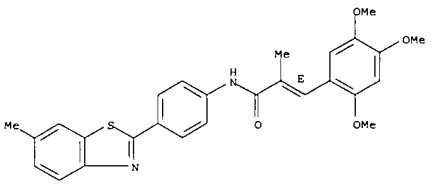
Double bond geometry as shown.



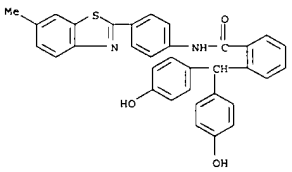
RN 206983-34-8 USPATFULL
CN 2-Propenamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3-(2,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L10 ANSWER 29 OF 74 USPATFULL (Continued)

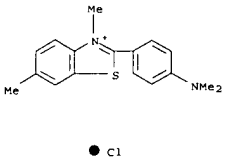


RN 206983-35-9 USPATFULL
CN Benzamide, 2-[bis(4-hydroxyphenyl)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

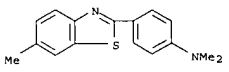


IT **2390-54-7 10205-62-6 10360-31-3**
190436-44-3 190436-47-6 190436-58-9
190436-62-5
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)

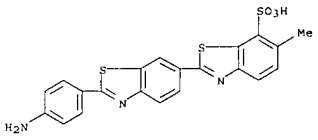
L10 ANSWER 29 OF 74 USPATFULL (Continued)



RN 10205-62-6 USPATFULL
CN Benzenamine, N,N-dimethyl-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

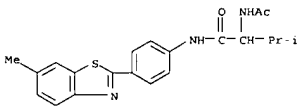


RN 10360-31-3 USPATFULL
CN [2,6'-Bibenzothiazole]-7-sulfonic acid, 2'-(4-aminophenyl)-6-methyl-, monosodium salt (9CI) (CA INDEX NAME)

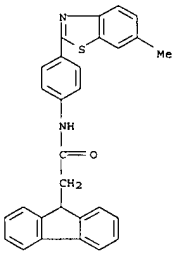


RN 190436-44-3 USPATFULL
CN Butanamide, 2-(acetylamino)-3-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 29 OF 74 USPATFULL (Continued)

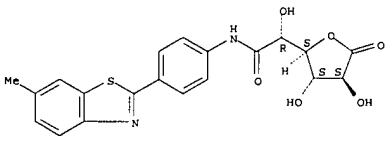


RN 190436-47-6 USPATFULL
CN 9H-Fluorene-9-acetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



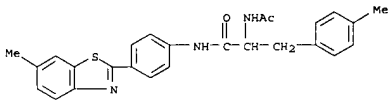
RN 190436-58-9 USPATFULL
CN L-Galactonic acid, 6-deoxy-6-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]-6-oxo-, .gamma.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190436-62-5 USPATFULL
CN Benzenepropanamide, .alpha.-(acetylamino)-4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 29 OF 74 USPATFULL (Continued)



L10 ANSWER 30 OF 74 USPATFULL
ACCESSION NUMBER: 1999:151272 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Harris, Scott M., Seattle, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)
Osteoscreen, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5990169		19991123
APPLICATION INFO.:	US 1997-806771		19970226 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-736228, filed on 23 Oct 1996, now abandoned		

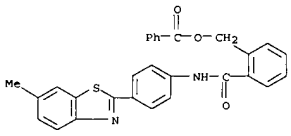
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Craires, Theodore J.
LEGAL REPRESENTATIVE: Morrison & Foerster, LLP
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 1040
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5 15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **206983-13-3 206983-19-9 206983-20-2 206983-21-3 206983-23-5 206983-25-7 206983-27-9 206983-28-0 206983-29-1 206983-30-4 206983-31-5 206983-32-6 206983-33-7 206983-34-8 206983-35-9**
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)

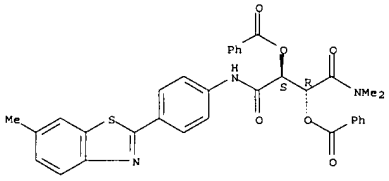
RN 206983-13-3 USPATFULL
CN Benzoic acid, 2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]ami

L10 ANSWER 30 OF 74 USPATFULL (Continued)

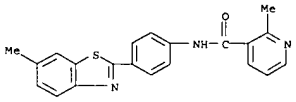


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3-bis(benzoyloxy) N,N-dimethyl-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

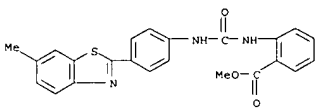


RN 206983-25-7 USPATFULL
CN 3-Pyridinecarboxamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



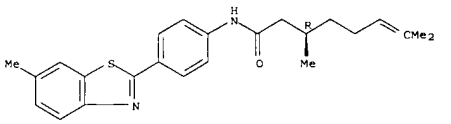
RN 206983-27-9 USPATFULL
CN 1-Naphthaleneacetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 30 OF 74 USPATFULL (Continued)
no] , methyl ester (9CI) (CA INDEX NAME)

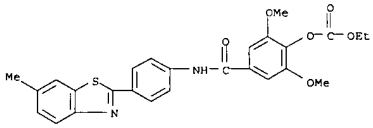


RN 206983-19-9 USPATFULL
CN 6-Octenamide, 3,7-dimethyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl] , (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

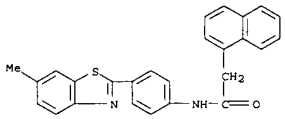


RN 206983-20-2 USPATFULL
CN Carbonic acid, 2,6-dimethoxy-4-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



RN 206983-21-3 USPATFULL
CN Benzamide, 2-[(benzoyloxy)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

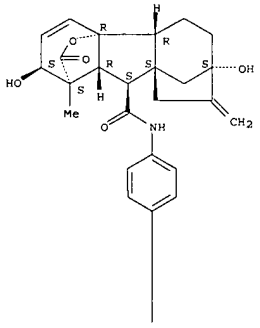
L10 ANSWER 30 OF 74 USPATFULL (Continued)



RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7-trihydroxy-1-methyl-10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

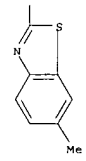
Absolute stereochemistry.

PAGE 1-A

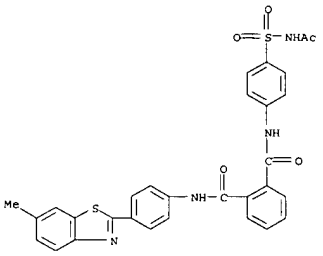


L10 ANSWER 30 OF 74 USPATFULL (Continued)

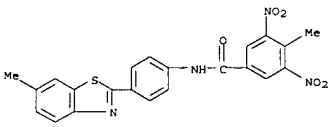
PAGE 2 A



RN 206983-29-1 USPATFULL
CN 1,2-Benzenedicarboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

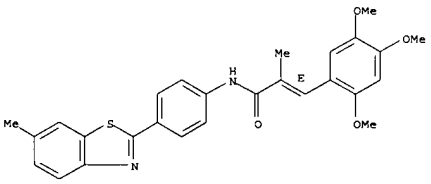


RN 206983-30-4 USPATFULL
CN Benzamide, 4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3,5-dinitro- (9CI) (CA INDEX NAME)

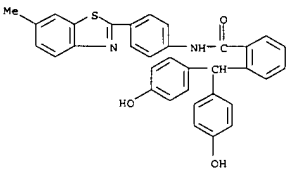


L10 ANSWER 30 OF 74 USPATFULL (Continued)
trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

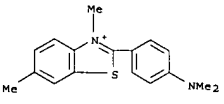
Double bond geometry as shown.



RN 206983-35-9 USPATFULL
CN Benzamide, 2-[bis(4-hydroxyphenyl)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

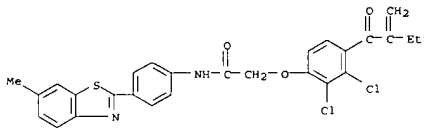


IT **2390-54-7 10205-62-6 10360-31-3**
190436-44-3 190436-47-6 190436-58-9
190436-62-5
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)

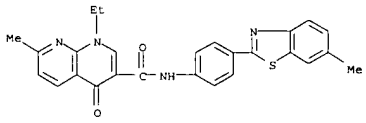


● Cl⁻

L10 ANSWER 30 OF 74 USPATFULL (Continued)
RN 206983-31-5 USPATFULL
CN Acetamide, 2-[2,3-dichloro-4-(2-methylene-1-oxobutyl)phenoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

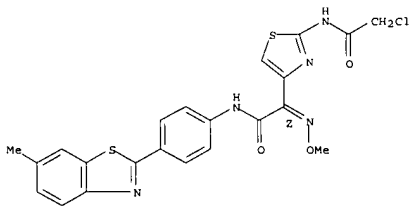


RN 206983-32-6 USPATFULL
CN 1,8-Naphthyridine-3-carboxamide, 1-ethyl-1,4-dihydro-7-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)



RN 206983-33-7 USPATFULL
CN 4-Thiazoleacetamide, 2-[(chloroacetyl)amino]-.alpha.-(methoxyimino)-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (.alpha.Z)- (9CI) (CA INDEX NAME)

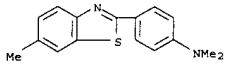
Double bond geometry as shown.



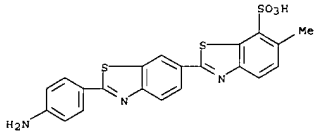
RN 206983-34-8 USPATFULL
CN 2-Propenamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3-(2,4,5-

L10 ANSWER 30 OF 74 USPATFULL (Continued)

RN 10205-62-6 USPATFULL
CN Benzenamine, N,N-dimethyl-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

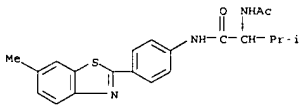


RN 10360-31-3 USPATFULL
CN [2,6'-Bibenzothiazole]-7-sulfonic acid, 2'-(4-aminophenyl)-6-methyl-, monosodium salt (9CI) (CA INDEX NAME)



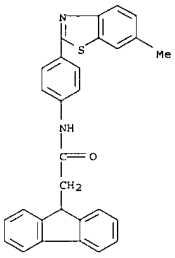
● Na

RN 190436-44-3 USPATFULL
CN Butanamide, 2-(acetylamino)-3-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



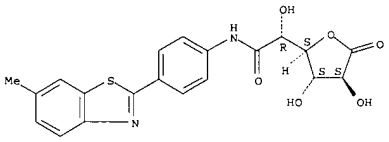
RN 190436-47-6 USPATFULL
CN 9H-Fluorene-9-acetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 30 OF 74 USPATFULL (Continued)

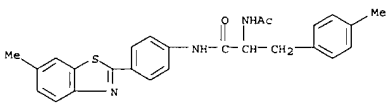


RN 190436-58-9 USPATFULL
CN L-Galactonic acid,
6-deoxy-6-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]
6-oxo-, .gamma.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190436-62-5 USPATFULL
CN Benzenepropanamide, .alpha.-(acetylamino) 4-methyl-N [4 (6-methyl 2 benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

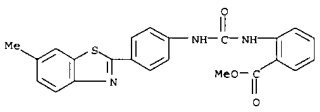


L10 ANSWER 31 OF 74 USPATFULL
ACCESSION NUMBER: 1999:124909 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Kontoyianni, Maria, Seattle, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): Zymogenetics, Inc., Seattle, WA, United States (U.S. corporation)
Osteoscreen, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5965573		19991012
APPLICATION INFO.:	US 1997-812141		19970306 (8)

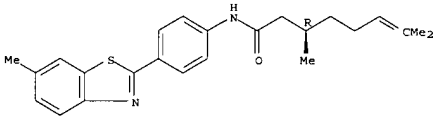
RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-735874, filed on 23 Oct 1996, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 91 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 1038
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5-15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.
IT **206983-13-3 206983-19-9 206983-20-2 206983-21-3 206983-23-5 206983-25-7 206983-27-9 206983-28-0 206983-29-1 206983-30-4 206983-31-5 206983-32-6 206983-33-7 206983-34-8 206983-35-9**
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)
RN 206983-13-3 USPATFULL
CN Benzoic acid,
2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]ami

L10 ANSWER 31 OF 74 USPATFULL (Continued)
no]-, methyl ester (9CI) (CA INDEX NAME)

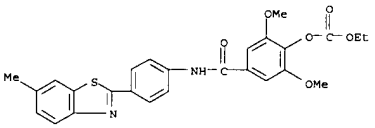


RN 206983-19-9 USPATFULL
CN 6-Octenamide, 3,7-dimethyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (3R)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

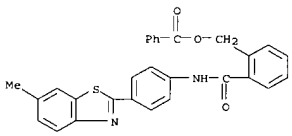


RN 206983-20-2 USPATFULL
CN Carbonic acid, 2,6-dimethoxy-4-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



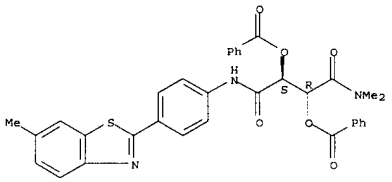
RN 206983-21-3 USPATFULL
CN Benzamide,
2-[(benzoyloxy)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 31 OF 74 USPATFULL (Continued)

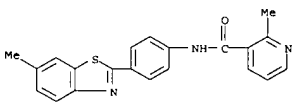


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3-bis(benzoyloxy)-N,N-dimethyl-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

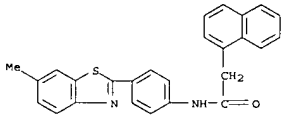


RN 206983-25-7 USPATFULL
CN 3-Pyridinecarboxamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 206983-27-9 USPATFULL
CN 1-Naphthaleneacetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

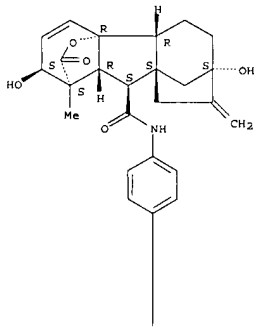
L10 ANSWER 31 OF 74 USPATFULL (Continued)



RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7-trihydroxy-1-methyl-10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

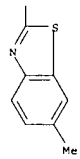
Absolute stereochemistry.

PAGE 1 A

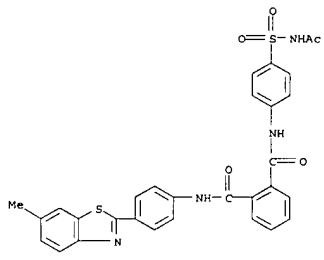


L10 ANSWER 31 OF 74 USPATFULL (Continued)

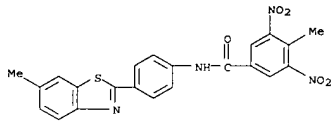
PAGE 2 A



RN 206983-29-1 USPATFULL
CN 1,2-Benzenedicarboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

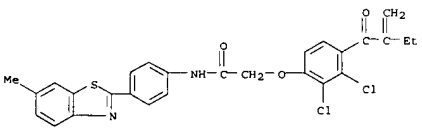


RN 206983-30-4 USPATFULL
CN Benzamide, 4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3,5-dinitro- (9CI) (CA INDEX NAME)

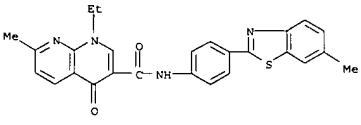


L10 ANSWER 31 OF 74 USPATFULL (Continued)

RN 206983-31-5 USPATFULL
CN Acetamide, 2-[2,3-dichloro-4-(2-methylene-1-oxobutyl)phenoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

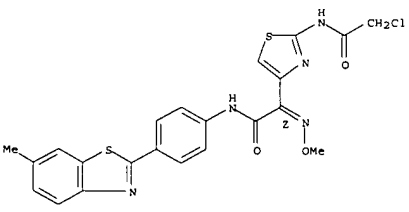


RN 206983-32-6 USPATFULL
CN 1,8-Naphthyridine-3-carboxamide, 1-ethyl-1,4-dihydro-7-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)



RN 206983-33-7 USPATFULL
CN 4-Thiazoleacetamide, 2-[(chloroacetyl)amino]-.alpha.-(methoxyimino)-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (.alpha.Z)- (9CI) (CA INDEX NAME)

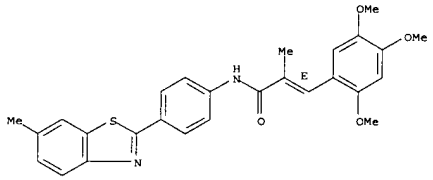
Double bond geometry as shown.



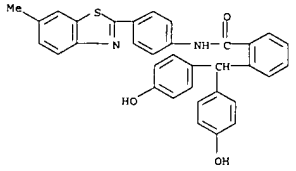
RN 206983-34-8 USPATFULL
CN 2-Propenamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3-(2,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L10 ANSWER 31 OF 74 USPATFULL (Continued)

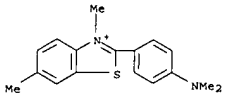


RN 206983-35-9 USPATFULL
CN Benzamide, 2-[bis(4-hydroxyphenyl)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



IT **2390-54-7 10205-62-6 10360-31-3**
190436-44-3 190436-47-6 190436-58-9
190436-62-5
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)

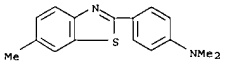
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI) (CA INDEX NAME)



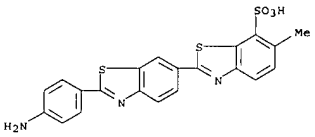
● Cl⁻

RN 10205-62-6 USPATFULL
CN Benzenamine, N,N-dimethyl-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

L10 ANSWER 31 OF 74 USPATFULL (Continued)

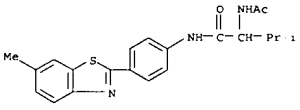


RN 10360 31 3 USPATFULL
CN [2,6' Bibenzothiazole] 7 sulfonic acid, 2' (4 aminophenyl) 6 methyl , monosodium salt (9CI) (CA INDEX NAME)



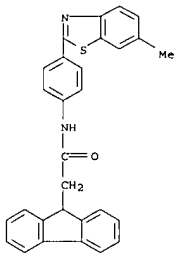
● Na

RN 190436 44 3 USPATFULL
CN Butanamide, 2 (acetylamino) 3 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



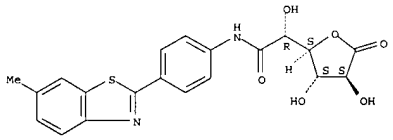
RN 190436-47-6 USPATFULL
CN 9H-Fluorene-9-acetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 31 OF 74 USPATFULL (Continued)

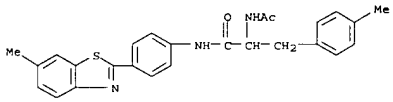


RN 190436 58 9 USPATFULL
CN L Galactonic acid,
6 deoxy 6 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino] 6 oxo , .gamma. lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190436-62-5 USPATFULL
CN Benzenepropanamide, .alpha. (acetylamino) 4-methyl-N-[4-(6 methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 32 OF 74 USPATFULL

ACCESSION NUMBER: 1999:106452 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): Zymogenetic, Inc., Seattle, WA, United States (U.S. corporation)
Osteoscreen, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5948776		19990907
APPLICATION INFO.:	US 1997-808739		19970228 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-736318, filed on 23 Oct 1996, now abandoned		

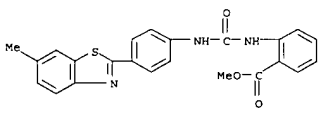
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Reamer, James H.
LEGAL REPRESENTATIVE: Murashige, Kate H.Morrison & Foerster, LLP
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 91 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 1056
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5-15.ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **206983-13-3 206983-19-9 206983-20-2 206983-21-3 206983-23-5 206983-25-7 206983-27-9 206983-28-0 206983-29-1 206983-30-4 206983-31-5 206983-32-6 206983-33-7 206983-34-8 206983-35-9**
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)

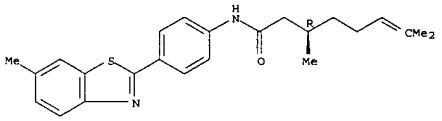
RN 206983-13-3 USPATFULL
CN Benzoic acid,
2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

L10 ANSWER 32 OF 74 USPATFULL (Continued)

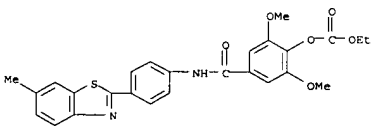


RN 206983-19-9 USPATFULL
CN 6-Octenamide, 3,7-dimethyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (3R)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

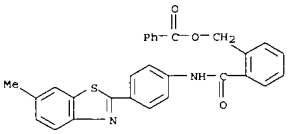


RN 206983-20-2 USPATFULL
CN Carbonic acid, 2,6 dimethoxy-4-[[[4-(6 methyl 2-benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



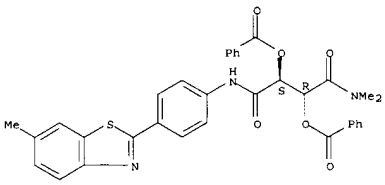
RN 206983-21-3 USPATFULL
CN Benzamide,
2-[(benzoyloxy)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 32 OF 74 USPATFULL (Continued)

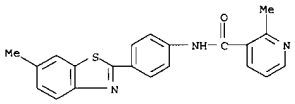


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3-bis(benzoyloxy)-N,N-dimethyl-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

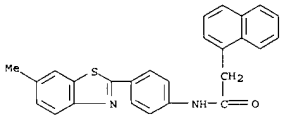


RN 206983-25-7 USPATFULL
CN 3-Pyridinecarboxamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



RN 206983-27-9 USPATFULL
CN 1-Naphthaleneacetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

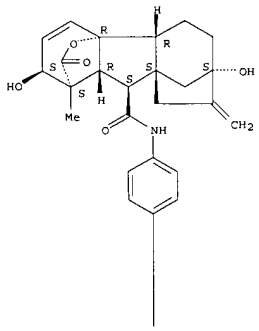
L10 ANSWER 32 OF 74 USPATFULL (Continued)



RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7-trihydroxy-1-methyl-10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

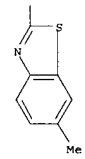
Absolute stereochemistry.

PAGE 1-A

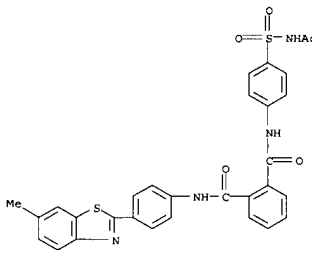


L10 ANSWER 32 OF 74 USPATFULL (Continued)

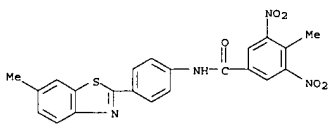
PAGE 2-A



RN 206983-29-1 USPATFULL
CN 1,2-Benzenedicarboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

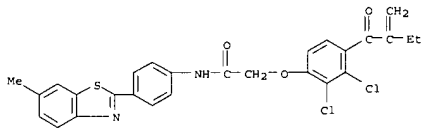


RN 206983-30-4 USPATFULL
CN Benzamide, 4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3,5-dinitro- (9CI) (CA INDEX NAME)

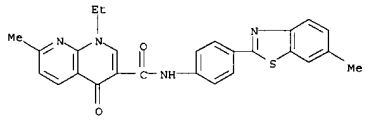


RN 206983-31-5 USPATFULL
CN Acetamide, 2-[2,3-dichloro-4-(2-methylene-1-oxobutyl)phenoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 32 OF 74 USPATFULL (Continued)

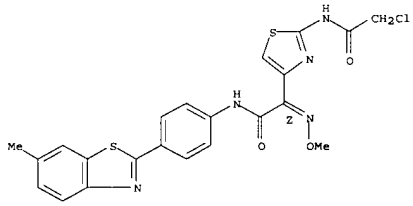


RN 206983-32-6 USPATFULL
CN 1,8-Naphthyridine-3-carboxamide, 1-ethyl-1,4-dihydro-7-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)



RN 206983-33-7 USPATFULL
CN 4-Thiazoleacetamide, 2-[(chloroacetyl)amino]-.alpha.-(methoxyimino)-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (.alpha.Z)- (9CI) (CA INDEX NAME)

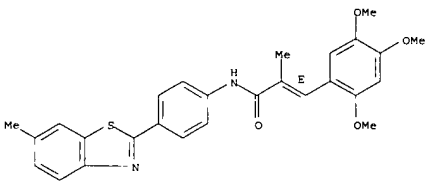
Double bond geometry as shown.



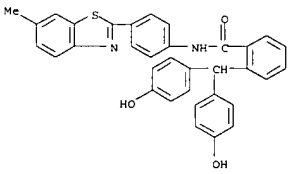
RN 206983-34-8 USPATFULL
CN 2-Propenamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3-(2,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L10 ANSWER 32 OF 74 USPATFULL (Continued)

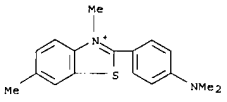


RN 206983 35 9 USPATFULL
CN Benzamide, 2 [bis(4 hydroxyphenyl)methyl] N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



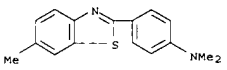
IT **2390-54-7 10205-62-6 10360-31-3 190436-44-3 190436-47-6 190436-58-9 190436-62-5**
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390 54 7 USPATFULL
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)

L10 ANSWER 32 OF 74 USPATFULL (Continued)

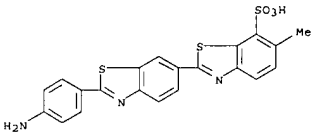


● Cl

RN 10205 62 6 USPATFULL
CN Benzenamine, N,N dimethyl 4 (6 methyl 2 benzothiazolyl) (9CI) (CA INDEX NAME)



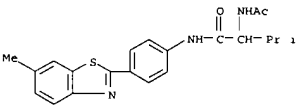
RN 10360 31 3 USPATFULL
CN [2,6' Bibenzothiazole] 7 sulfonic acid, 2' (4 aminophenyl) 6 methyl , monosodium salt (9CI) (CA INDEX NAME)



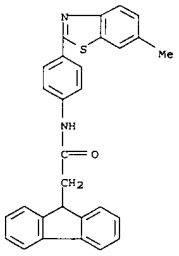
● Na

RN 190436 44 3 USPATFULL
CN Butanamide, 2 (acetylamino) 3 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 32 OF 74 USPATFULL (Continued)

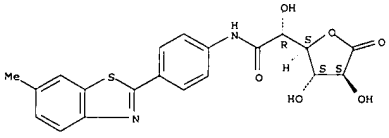


RN 190436 47 6 USPATFULL
CN 9H Fluorene 9 acetamide, N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



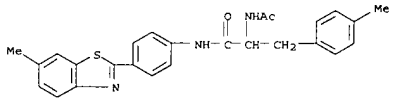
RN 190436 58 9 USPATFULL
CN L Galactonic acid, 6 deoxy 6 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino] 6 oxo , .gamma. lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 190436 62 5 USPATFULL
CN Benzenepropanamide, .alpha. (acetylamino) 4 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 32 OF 74 USPATFULL (Continued)



L10 ANSWER 33 OF 74 USPATFULL
ACCESSION NUMBER: 1999:78758 USPATFULL
TITLE: Methods for treating bone deficit conditions with benzothiazole
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Hurley, Laurence H., Austin, TX, United States
Kerwin, Sean M., Round Rock, TX, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): Zymogenetics, Inc., Seattle, WA, United States (U.S. corporation)
OsteoScreen, Inc., San Antonio, TX, United States (U.S. corporation)
University of Texas at Austin, Austin, TX, United States (U.S. corporation)

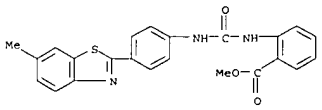
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5922753		19990713
APPLICATION INFO.:	US 1997-808742		19970228 (8)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-735881, filed on 23 Oct 1996, now abandoned		

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 965
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5-15 .ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

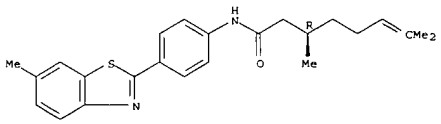
IT **206983-13-3 206983-19-9 206983-20-2**
206983-21-3 206983-23-5 206983-25-7
206983-27-9 206983-28-0 206983-29-1
206983-30-4 206983-31-5 206983-32-6
206983-33-7 206983-34-8 206983-35-9
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)

L10 ANSWER 33 OF 74 USPATFULL (Continued)
RN 206983-13-3 USPATFULL
CN Benzoic acid, 2-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]-, methyl ester (9CI) (CA INDEX NAME)

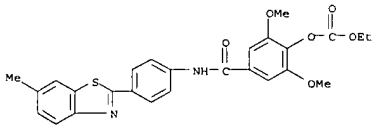


RN 206983-19-9 USPATFULL
CN 6-Octenamide, 3,7-dimethyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

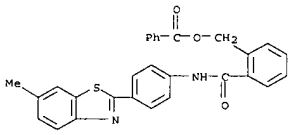


RN 206983-20-2 USPATFULL
CN Carbonic acid, 2,6-dimethoxy 4-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



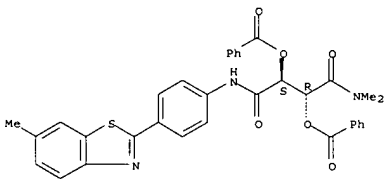
RN 206983-21-3 USPATFULL
CN Benzamide, 2-[(benzoyloxy)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 33 OF 74 USPATFULL (Continued)

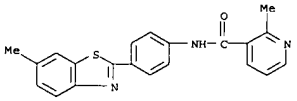


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3-bis(benzoyloxy)-N,N-dimethyl-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (2R,3S)- (9CI) (CA INDEX NAME)

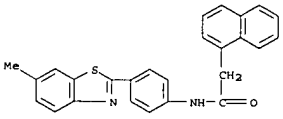
Absolute stereochemistry.



RN 206983-25-7 USPATFULL
CN 3-Pyridinecarboxamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



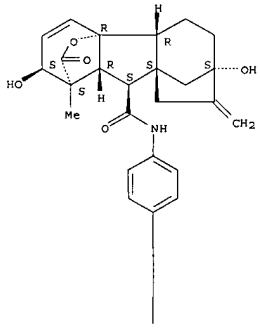
RN 206983-27-9 USPATFULL
CN 1-Naphthaleneacetamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



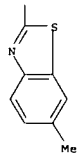
L10 ANSWER 33 OF 74 USPATFULL (Continued)
RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7-trihydroxy 1-methyl-10-[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

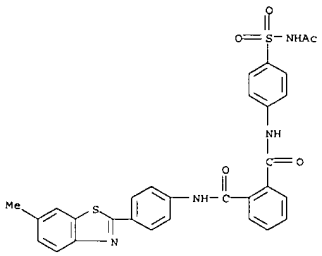


PAGE 2-A

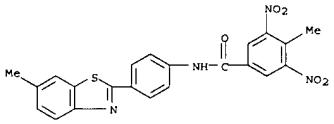


RN 206983-29-1 USPATFULL
CN 1,2-Benzenedicarboxamide, N [4-[(acetylamino)sulfonyl]phenyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

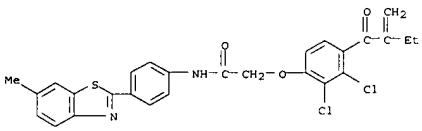
L10 ANSWER 33 OF 74 USPATFULL (Continued)



RN 206983 30 4 USPATFULL
CN Benzamide, 4 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 3,5 dinitro (9CI) (CA INDEX NAME)

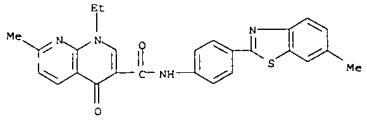


RN 206983 31 5 USPATFULL
CN Acetamide, 2 [2,3 dichloro 4 (2 methylene 1 oxobutyl)phenoxy] N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



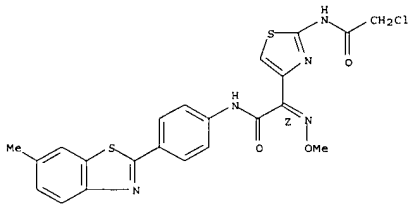
RN 206983 32 6 USPATFULL
CN 1,8 Naphthyridine 3 carboxamide, 1 ethyl 1,4 dihydro 7 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 4 oxo (9CI) (CA INDEX NAME)

L10 ANSWER 33 OF 74 USPATFULL (Continued)



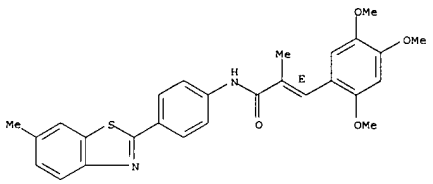
RN 206983 33 7 USPATFULL
CN 4 Thiazoleacetamide, 2 [(chloroacetyl)amino] .alpha. (methoxyimino) N [4 (6 methyl 2 benzothiazolyl)phenyl] , (.alpha.Z) (9CI) (CA INDEX NAME)

Double bond geometry as shown.

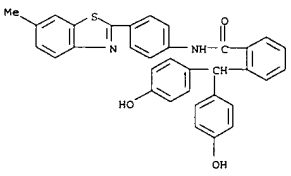


RN 206983 34 8 USPATFULL
CN 2 Propenamide, 2 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] 3 (2,4,5 trimethoxyphenyl) , (2E) (9CI) (CA INDEX NAME)

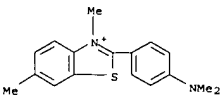
Double bond geometry as shown.



L10 ANSWER 33 OF 74 USPATFULL (Continued)
RN 206983 35 9 USPATFULL
CN Benzamide, 2 [bis(4 hydroxyphenyl)methyl] N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

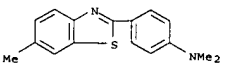


IT **2390-54-7 10205-62-6 10360-31-3 190436-44-3 190436-47-6 190436-58-9 190436-62-5**
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390 54 7 USPATFULL
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI) (CA INDEX NAME)



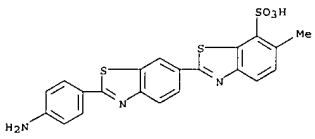
● Cl

RN 10205 62 6 USPATFULL
CN Benzenamine, N,N dimethyl 4 (6 methyl 2 benzothiazolyl) (9CI) (CA INDEX NAME)



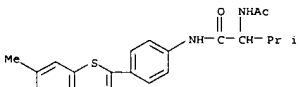
RN 10360 31 3 USPATFULL
CN [2,6' Bibenzothiazole] 7 sulfonic acid, 2' (4 aminophenyl) 6 methyl , monosodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 33 OF 74 USPATFULL (Continued)

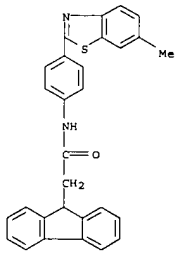


● Na

RN 190436 44 3 USPATFULL
CN Butanamide, 2 (acetylamino) 3 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



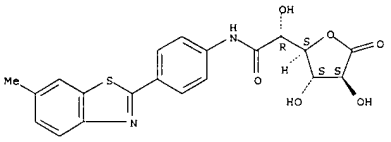
RN 190436 47 6 USPATFULL
CN 9H Fluorene 9 acetamide, N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



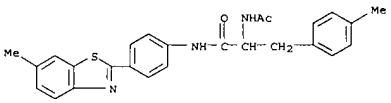
RN 190436 58 9 USPATFULL
CN L Galactonic acid, 6 deoxy 6 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino] 6 oxo , .gamma. lactone (9CI) (CA INDEX NAME)

L10 ANSWER 33 OF 74 USPATFULL (Continued)

Absolute stereochemistry.



RN 190436 62 5 USPATFULL
CN Benzenepropanamide, .alpha. (acetylamino) 4 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



L10 ANSWER 34 OF 74 USPATFULL
ACCESSION NUMBER: 1999:75664 USPATFULL
TITLE: Compositions and methods for treating bone deficit conditions
INVENTOR(S): Petrie, Charles, Woodinville, WA, United States
Orme, Mark W., Seattle, WA, United States
Baindur, Nand, Edmonds, WA, United States
Robbins, Kirk G., Renton, WA, United States
Kontoyianni, Maria, Seattle, WA, United States
Mundy, Gregory R., San Antonio, TX, United States
PATENT ASSIGNEE(S): Zymogenetics, Inc., Seattle, WA, United States (U.S. corporation)
Osteoscreen, Inc., San Antonio, TX, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5919808		19990706
APPLICATION INFO.:	US 1997 808743		19970228 (8)

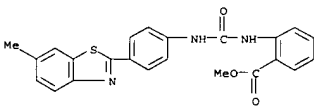
RELATED APPLN. INFO.: Continuation of Ser. No. US 1996 735876, filed on 23 Oct 1996, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Criares, Theodore J.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 91 Drawing Figure(s); 91 Drawing Page(s)
LINE COUNT: 975
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compounds containing two aromatic systems covalently linked through a linker containing one or more atoms, or "linker" defined as including a covalent bond per se so as to space the aromatic systems at a distance 1.5 15.ANG., are effective in treating conditions associated with bone deficits. The compounds can be administered to vertebrate subjects alone or in combination with additional agents that promote bone growth or that inhibit bone resorption. They can be screened for activity prior to administration by assessing their ability to effect the transcription of a reporter gene coupled to a promoter associated with a bone morphogenetic protein and/or their ability to stimulate calvarial growth in model animal systems.

IT **206983-13-3 206983-19-9 206983-20-2**
206983-21-3 206983-23-5 206983-25-7
206983-27-9 206983-28-0 206983-29-1
206983-30-4 206983-31-5 206983-32-6
206983-33-7 206983-34-8 206983-35-9
(prepn. and/or use of linked arom. and heteroarom. compds. for treating bone deficit conditions)

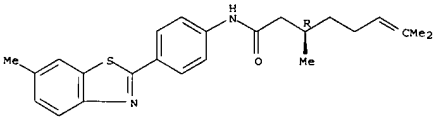
RN 206983 13 3 USPATFULL
CN Benzoic acid,
2 [[[[4 (6 methyl 2 benzothiazolyl)phenyl]amino]carbonyl]ami

L10 ANSWER 34 OF 74 USPATFULL (Continued)
no] , methyl ester (9CI) (CA INDEX NAME)

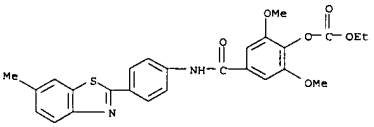


RN 206983-19-9 USPATFULL
CN 6 Octenamide, 3,7 dimethyl N [4-(6 methyl 2 benzothiazolyl)phenyl] , (3R)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

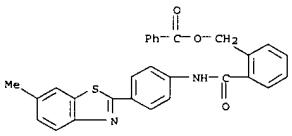


RN 206983 20 2 USPATFULL
CN Carbonic acid, 2,6 dimethoxy 4 [[[4 (6 methyl 2 benzothiazolyl)phenyl]amino]carbonyl]phenyl ethyl ester (9CI) (CA INDEX NAME)



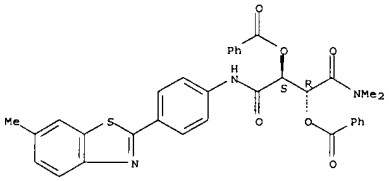
RN 206983 21 3 USPATFULL
CN Benzamide,
2 [(benzoyloxy)methyl] N [4-(6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 34 OF 74 USPATFULL (Continued)

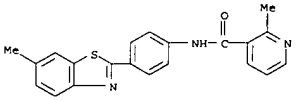


RN 206983-23-5 USPATFULL
CN Butanediamide, 2,3 bis(benzoyloxy) N,N dimethyl N' [4 (6 methyl 2 benzothiazolyl)phenyl] , (2R,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

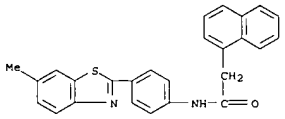


RN 206983 25 7 USPATFULL
CN 3 Pyridinecarboxamide, 2 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



RN 206983 27 9 USPATFULL
CN 1 Naphthaleneacetamide, N [4-(6 methyl-2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

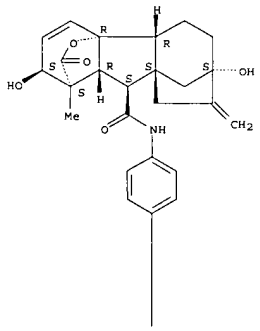
L10 ANSWER 34 OF 74 USPATFULL (Continued)



RN 206983-28-0 USPATFULL
CN Gibb-3-ene-1-carboxylic acid, 2,4a,7 trihydroxy-1-methyl-10-[[[4-(6-methyl-2 benzothiazolyl)phenyl]amino]carbonyl]-8-methylene-, .gamma.-lactone, (1.alpha.,2.beta.,4a.alpha.,4b.beta.,10.beta.)- (9CI) (CA INDEX NAME)

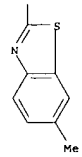
Absolute stereochemistry.

PAGE 1-A

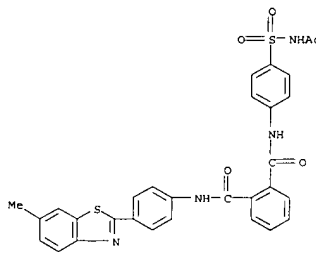


L10 ANSWER 34 OF 74 USPATFULL (Continued)

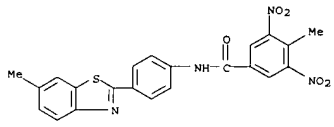
PAGE 2-A



RN 206983-29-1 USPATFULL
CN 1,2-Benzenedicarboxamide, N-[4-[(acetylamino)sulfonyl]phenyl]-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

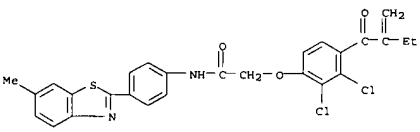


RN 206983-30-4 USPATFULL
CN Benzamide, 4-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3,5-dinitro- (9CI) (CA INDEX NAME)

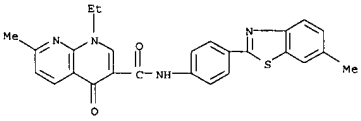


L10 ANSWER 34 OF 74 USPATFULL (Continued)

RN 206983-31-5 USPATFULL
CN Acetamide, 2-[2,3-dichloro-4-(2-methylene-1-oxobutyl)phenoxy]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

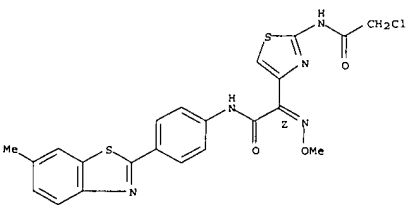


RN 206983-32-6 USPATFULL
CN 1,8-Naphthyridine-3-carboxamide, 1-ethyl-1,4-dihydro-7-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)



RN 206983-33-7 USPATFULL
CN 4-Thiazoleacetamide, 2-[(chloroacetyl)amino]-.alpha.-(methoxyimino)-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-, (.alpha.Z)- (9CI) (CA INDEX NAME)

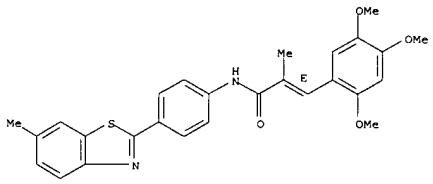
Double bond geometry as shown.



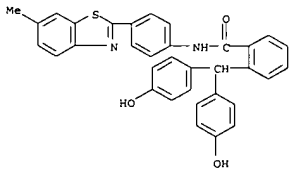
RN 206983-34-8 USPATFULL
CN 2-Propenamide, 2-methyl-N-[4-(6-methyl-2-benzothiazolyl)phenyl]-3-(2,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

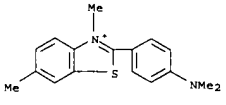
L10 ANSWER 34 OF 74 USPATFULL (Continued)



RN 206983-35-9 USPATFULL
CN Benzamide, 2-[bis(4-hydroxyphenyl)methyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



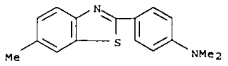
IT **2390-54-7 10205-62-6 10360-31-3 190436-44-3 190436-47-6 190436-58-9 190436-62-5**
(prepn. of (hetero)arom. compds. for treating bone deficit conditions)
RN 2390-54-7 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI) (CA INDEX NAME)



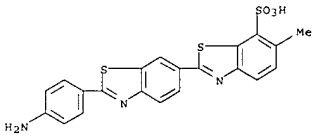
● Cl⁻

RN 10205-62-6 USPATFULL
CN Benzenamine, N,N-dimethyl-4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

L10 ANSWER 34 OF 74 USPATFULL (Continued)

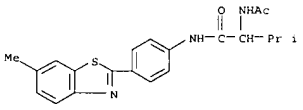


RN 10360 31 3 USPATFULL
CN [2,6' Bibenzothiazole] 7 sulfonic acid, 2' (4 aminophenyl) 6 methyl , monosodium salt (9CI) (CA INDEX NAME)



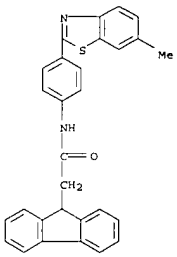
● Na

RN 190436-44 3 USPATFULL
CN Butanamide, 2 (acetylamino) 3 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



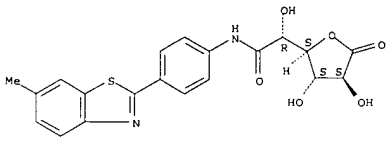
RN 190436 47 6 USPATFULL
CN 9H Fluorene 9 acetamide, N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)

L10 ANSWER 34 OF 74 USPATFULL (Continued)

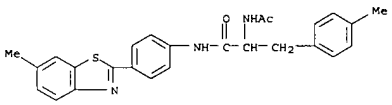


RN 190436 58 9 USPATFULL
CN L Galactonic acid,
6 deoxy 6 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino] 6 oxo , .gamma. lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



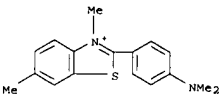
RN 190436 62 5 USPATFULL
CN Benzenepropanamide, .alpha. (acetylamino) 4 methyl N [4 (6 methyl 2 benzothiazolyl)phenyl] (9CI) (CA INDEX NAME)



L10 ANSWER 35 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:402799 CAPLUS
DOCUMENT NUMBER: 129:137362
TITLE: Iron borates as base generators and curable compositions containing them and cured products therefrom
INVENTOR(S): Toba, Yasumasa
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10168092	A2	19980623	JP 1996-328066	19961209

OTHER SOURCE(S): MARPAT 129:137362
AB The curable compns. comprise (A) LnFe3+.3BAr3R- [I; L = **ligand** from NH3, pyridine, imidazole, ethylenediamine, trimethylenediamine, tetraethylenediamine, hexamethylenediamine, propylenediamine, 1,2-cyclohexanediamine, N,N-diethylethylenediamine, and/or diethylenetriamine; n = 2-6; Ar = C6-18 monocyclic or polycyclic aryl group optionally substituted with F, Cl, Br, OH, carboxy, mercapto, cyano, nitro, azido groups; R = C1-18 linear, branched, or cyclic alkyl groups optionally substituted with F, Cl, Br, OH, carboxy, mercapto, cyano, nitro, or azido groups] as base generators, (B) sensitizers, and (C) base-curable compds. or (D) radically polymerizable compds. and are useful for coatings, polymer moldings, sealants, inks, and photoresists. Thus, 1.38 parts hexaammineiron (III) chloride was treated with 5.0 parts Li butyltriphenyl borate to give I (L = NH3, n = 6, Ar = Ph, R = Bu), 3 parts of which were mixed with 100 parts pentaerythritol triacrylate and 0.5 part 4,4'-diethylaminobenzophenone, applied to Fe plate, and cured by UV rays to give a coating exhibiting no corrosion on exposure of the coated plate to outdoors for 1 mo.
IT **2390-54-7**, Setoflavin T
RL: CAT (Catalyst use); USES (Uses)
(photosensitizer; iron borates as base generators for curable compns.)
RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI) (CA INDEX NAME)



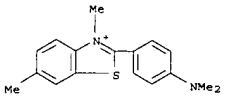
● Cl

L10 ANSWER 35 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)

L10 ANSWER 36 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:361038 CAPLUS
DOCUMENT NUMBER: 129:123884
TITLE: Base generators and curable compositions and cured products using the same
INVENTOR(S): Toba, Yasumasa
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10152548	A2	19980609	JP 1996-313288	19961125

OTHER SOURCE(S): MARPAT 129:123884
AB The title base generators having excellent soly., stability and energy beam sensitivity are $LnCo_3$+.3BAr3R- [L = **ligand**(s) chosen from ammonia, pyridine, imidazole, ethylenediamine, trimethylenediamine, tetramethylenediamine, hexamethylenediamine, propylenediamine, 1,2-cyclohexanediamine, N,N-diethylethylenediamine, and diethylenetriamine; n = 2-6; Ar = C6-18 mono- or condensed polynuclear aryl group with or without substituent(s) chosen from F, Cl, Br, OH, carboxy, SH, cyano, nitro, azido group; R = C1-18 linear, branched, or cycloalkyl group with or without substituent(s) chosen from F, Cl, Br, OH, carboxy, SH, cyano, nitro, azido group]. A compn. from 3 parts hexamminecobalt(III)tris(triphenylbutylborate) and 100 parts pentaerythritol triacrylate was coated on an iron plate and UV-irradiated to give an anticorrosive coating.
IT **2390-54-7**, Setoflavin T
RL: CAT (Catalyst use); USES (Uses)
(base generators and curable compns. and cured products using the same)
RN 2390-54-7 CAPLUS
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI)
(CA INDEX NAME)



● Cl⁻

L10 ANSWER 37 OF 74 USPATFULL
ACCESSION NUMBER: 1998:159920 USPATFULL
TITLE: Nonpeptide insulin receptor agonists
INVENTOR(S): Sportsman, Richard, San Francisco, CA, United States
Villar, Hugo O., Newark, CA, United States
Kauvar, Lawrence M., San Francisco, CA, United States
Spevak, Wayne R., Albany, CA, United States
PATENT ASSIGNEE(S): Terrapin Technologies, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5851988		19981222
APPLICATION INFO.:	US 1997-784854		19970115 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fitzgerald, David L.
ASSISTANT EXAMINER: Pak, Michael
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 731
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modulation of the activity of the insulin receptor, enhancement of glucose uptake by cells, and other effects significant in the control and management of diabetes are accomplished using compounds of the formula ##STR1## wherein

each A is independently a proton-accepting substituent;

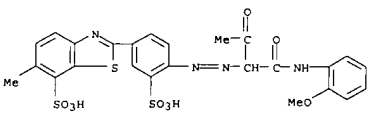
each R is independently a noninterfering substituent;

n is 0, 1, or 2; and

each linker is independently an isostere of --NHCONH-- or of -N.dbd.N-- or of --NHCO--.

Compounds in the genus of Formula (1) can also be used for structure activity studies to identify features responsible for the relevant activities.
IT **10190-68-8P**, TER 3938
(modulators of insulin receptor activity, screening, and therapeutic use)
RN 10190-68-8 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2-[4-[[1-[[(2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo]-3-sulfophenyl]-6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 37 OF 74 USPATFULL (Continued)



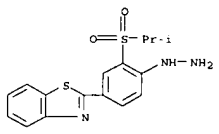
●2 Na

L10 ANSWER 38 OF 74 USPATFULL
ACCESSION NUMBER: 1998:159683 USPATFULL
TITLE: Color-developing agent, silver halide photographic light-sensitive material and image-forming method
INVENTOR(S): Okawa, Atsuhiro, Minami-ashigara, Japan
Makuta, Toshiyuki, Minami-ashigara, Japan
Taguchi, Toshiki, Minami-ashigara, Japan
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Kanagawa-ken, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5851749		19981222
APPLICATION INFO.:	US 1996-757730		19961126 (8)

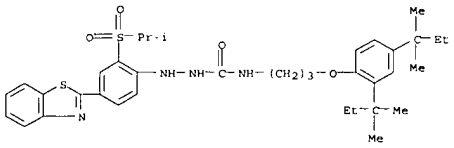
	NUMBER	DATE
PRIORITY INFORMATION:	JP 1995-334183	19951130

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Le, Hoa Van
LEGAL REPRESENTATIVE: Birch, Stewart, Kolasch & Birch, LLP
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
LINE COUNT: 3627
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There is disclosed novel color-developing agents of the formula (I). There is also disclosed silver halide photographic light-sensitive materials and image-forming methods, using the color-developing agent. The color-developing agent is excellent in color-forming property, and the image obtained from the color-developing agent is good in stability of hue and image. ##STR1## wherein Z.sup.1 represents an acyl group, a carbamoyl group, an alkoxycarbonyl group, an aryloxycarbonyl group, a sulfonyl group, or a carbonimidoyl group, Q.sup.1 represents a group of atoms required to form a 5- or 6-membered aromatic ring together with the C, Q.sup.2 represents a heterocyclic residue, Y.sup.1 represents a group capable of substitution onto the aromatic ring, m is 1 or 2, and n is an integer of 0 to 3.
IT **194790-72-2P**
(N-(heterocyclylaryl)hydrazine derivs. for principal color developers, silver halide photog. light-sensitive material, and imaging method)
RN 194790-72-2 USPATFULL
CN Benzothiazole, 2-[4-hydrazino-3-[(1-methylethyl)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



IT **194790-62-0P**
(photog. color developer; N-(heterocyclylaryl)hydrazine derivs. for principal color developers, silver halide photog. light-sensitive

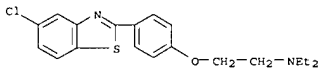
L10 ANSWER 38 OF 74 USPATFULL (Continued)
material, and imaging method)
RN 194790-62-0 USPATFULL
CN Hydrazinecarboxamide, 2-[4-(2-benzothiazolyl)-2-[(1-methylethyl)sulfonyl]phenyl]-N-[3-[2,4-bis(1,1-dimethylpropyl)phenoxy]propyl]- (9CI) (CA INDEX NAME)



L10 ANSWER 39 OF 74 USPATFULL
ACCESSION NUMBER: 1998:157363 USPATFULL
TITLE: Peripherally active anti-hyperalgesic opiates
INVENTOR(S): Yaksh, Tony L., San Diego, CA, United States
PATENT ASSIGNEE(S): Regents of the University of California, Oakland, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5849761		19981215
APPLICATION INFO.:	US 1995-528510		19950912 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Spivack, Phyllis G.
LEGAL REPRESENTATIVE: Seidman, Stephanie L.Heller Ehrman White & McAuliffe
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 3472
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods using compositions for the treatment of peripheral hyperalgesia are provided. The compositions contain an anti-hyperalgesia effective amount of one or more compounds that directly or indirectly interact with peripheral opiate receptors, but that do not, upon topical or local
administration, elicit central nervous system side effects. The anti-diarrheal compound 4-(p-chlorophenyl)-4-hydroxy-N-N-dimethyl-.alpha.,.alpha.-diphenyl-1-piperidinebutyramide hydrochloride is preferred for use in the compositions of the claimed methods.
IT **15599-36-7**, Halethazole
(peripherally active anti-hyperalgesic opiates)
RN 15599-36-7 USPATFULL
CN Ethanamine, 2-[4-(5-chloro-2-benzothiazolyl)phenoxy]-N,N-diethyl- (9CI) (CA INDEX NAME)



L10 ANSWER 40 OF 74 USPATFULL
ACCESSION NUMBER: 1998:135063 USPATFULL
TITLE: Nonpeptide insulin receptor agonists
INVENTOR(S): Sportsman, Richard, San Francisco, CA, United States
Villar, Hugo O., Newark, CA, United States
Kauvar, Lawrence M., San Francisco, CA, United States
PATENT ASSIGNEE(S): Terrapin Technologies, Inc., South San Francisco, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5810918		19981103
APPLICATION INFO.:	US 1997-784857		19970115 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Weddington, Kevin E.
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 672
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modulation of the activity of the insulin receptor, enhancement of glucose uptake by cells, and other effects significant in the control and management of diabetes are accomplished using compounds of the formula ##STR1## wherein each Ar is independently an aromatic moiety; each A is independently a proton-accepting substituent;

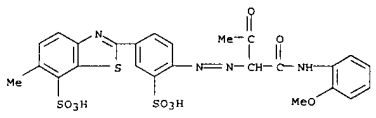
each R is independently a noninterfering substituent;

m is 0 or 1;

n is 4-6; and

each linker is independently an isostere of --CH.sub.2 --, --CH.dbd.CH-- or --NCHO--. Compounds in the genus of Formula (1) can also be used for structure activity studies to identify features responsible for the relevant activities.
IT **10190-68-8P**, TER 3938
(modulators of insulin receptor activity, screening, and therapeutic use)
RN 10190-68-8 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2-[4-[[1-[[[(2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo]-3-sulfophenyl]-6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 40 OF 74 USPATFULL (Continued)

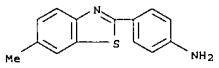


●2 Na

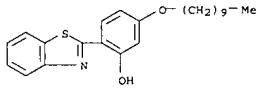
L10 ANSWER 41 OF 74 USPATFULL
ACCESSION NUMBER: 1998:45062 USPATFULL
TITLE: Quenching reagents and assays for enzyme mediated luminescence
INVENTOR(S): Sherf, Bruce A., Waunakee, WI, United States
Wood, Keith V., Madison, WI, United States
Schenborn, Elaine T., Middleton, WI, United States
PATENT ASSIGNEE(S): Promega Corporation, Madison, WI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5744320		19980428
APPLICATION INFO.:	US 1995 472546		19950607 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Leary, Louise
LEGAL REPRESENTATIVE: DeWitt Ross & Stevens SC
NUMBER OF CLAIMS: 60
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 1907
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to single and dual reporter luminescence assays utilizing general and specific reagents to quench enzyme mediated reactions. In one embodiment of the invention, a reagent is added to the assay which non specifically quenches enzyme mediated luminescent reactions. In another embodiment of the invention, a reagent is added to the assay which simultaneously quenches one enzyme mediated luminescent reaction while activating another distinct enzyme mediated luminescent reaction. An assay kit containing specific quench reagents, and the reagents themselves are also disclosed.
IT **92-36-4**, 2 (4 Aminophenyl) 6 methylbenzothiazole
(quenching reagents and assays for enzyme mediated luminescence)
RN 92 36 4 USPATFULL
CN Benzenamine, 4 (6 methyl 2 benzothiazolyl) (9CI) (CA INDEX NAME)



L10 ANSWER 42 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:318363 CAPLUS
DOCUMENT NUMBER: 129:74315
TITLE: Metallomesogens: synthesis and properties
AUTHOR(S): Meyer, Emerson; Zucco, Cesar; Gallardo, Hugo
CORPORATE SOURCE: Department of Chemistry, Universidade Federal de Santa Catarina, Florianopolis, Brazil
SOURCE: Journal of Materials Chemistry (1998), 8(6), 1351 1354
CODEN: JMACEP; ISSN: 0959 9428
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis, characterization and mesogenic behavior of the Cu(II) and oxovanadium(IV) complexes derived from phenyltetrazole and benzothiazole and their corresponding **ligands** are reported. The **ligands** did not exhibit mesomorphism, whereas the complexes form monotropic smectic A and smectic C mesophases. The mesophases were identified according to their textures by optical microscopy.
IT **209112-11-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reactant in copper and vanadyl (hydroxydecyloxyphenyl)benzothiazole complex formation)
RN 209112 11 8 CAPLUS
CN Phenol, 2 (2 benzothiazolyl) 5 (decyloxy) (9CI) (CA INDEX NAME)



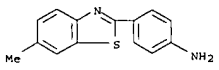
L10 ANSWER 43 OF 74 USPATFULL
ACCESSION NUMBER: 97:90977 USPATFULL
TITLE: Process for dyeing paper
INVENTOR(S): Kaser, Adolf, Bottmingen, Switzerland
PATENT ASSIGNEE(S): Ciba Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5674299		19971007
APPLICATION INFO.:	US 1995 500654		19950712 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	CH 1994 2269	19940715

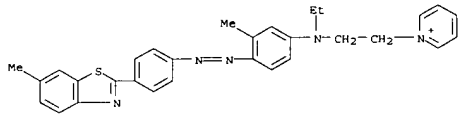
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Einsmann, Margaret
LEGAL REPRESENTATIVE: Mansfield, Kevin T., Dohmann, George R.
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 837
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The cationic or basic dyes of formulae (1) and (2) cited in claim 1 are particularly suitable for dyeing paper.

These dyes dye paper in a yellow, orange or brown shade having good fastness properties.
IT **92-36-4**, Dehydrothio p toluidine
(diazo component; prepn. of cationic azo dyes for paper)
RN 92 36 4 USPATFULL
CN Benzenamine, 4 (6 methyl 2 benzothiazolyl) (9CI) (CA INDEX NAME)



IT **174898-30-7P**
(orange; process and dyes for dyeing of paper)
RN 174898 30 7 USPATFULL
CN Pyridinium, 1 [2 [ethyl[3 methyl 4 [[4 (6 methyl 2 benzothiazolyl)phenyl]azo]phenyl]amino]ethyl] , chloride (9CI) (CA INDEX NAME)

L10 ANSWER 43 OF 74 USPATFULL (Continued)

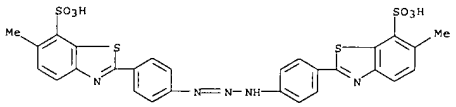


● Cl⁻

L10 ANSWER 44 OF 74 USPATFULL
ACCESSION NUMBER: 97:7804 USPATFULL
TITLE: Covalent cyanine dye oligonucleotide conjugates
INVENTOR(S): Linn, C. Preston, Durham, NC, United States
Pitner, J. Bruce, Durham, NC, United States
Mize, Pat D., Durham, NC, United States
PATENT ASSIGNEE(S): Becton Dickinson and Company, Franklin Lakes, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5597696		19970128
APPLICATION INFO.:	US 1994 276238		19940718 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Houtteman, Scott W.
LEGAL REPRESENTATIVE: Highet, Esq., David W.
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 381
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to conjugates of a cyanine dye and an oligonucleotide. When these conjugates hybridize or bind to a target, a detectable increase in fluorescence intensity or change in fluorescence polarization is observed.
IT **1829-00-1DP**, Thiazole yellow, oligonucleotide conjugates
(prepn. of oligonucleotide directly linked with cyanine dye, conjugate fluorescence, and labeled oligonucleotide use as anal. reagent)
RN 1829-00-1 USPATFULL
CN 7 Benzothiazolesulfonic acid, 2,2' (1-triazene 1,3 diyldi 4,1 phenylene)bis[6 methyl-, disodium salt (9CI) (CA INDEX NAME)



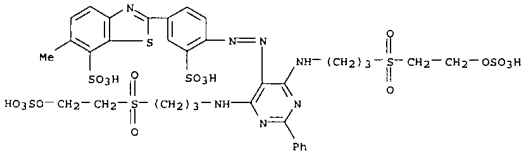
●2 Na

L10 ANSWER 45 OF 74 USPATFULL
ACCESSION NUMBER: 96:50429 USPATFULL
TITLE: Process for the dyeing of cellulose containing fibre materials with reactive dyes
INVENTOR(S): Landre, Jean Francois, Riedisheim, France
Tzikas, Athanassios, Pratteln, Switzerland
Luttringer, Jean P., Rixheim, France
PATENT ASSIGNEE(S): Ciba-Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5525124		19960611
	WO 9318224		19930916
APPLICATION INFO.:	US 1994 295765		19940902 (8)
	WO 1993 EP426		19930224
			19940902 PCT 371 date
			19940902 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	CH 1992 714	19920306
	CH 1992-715	19920306

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Einsmann, Margaret
LEGAL REPRESENTATIVE: Mansfield, Kevin T.
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 1417
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **156202-64-1**
(dyeing of cotton by, in presence of low amts. of mineral acid salts)
RN 156202-64-1 USPATFULL
CN 7 Benzothiazolesulfonic acid, 6 methyl 2-[4-[[2-phenyl-4,6 bis[[3-[[2-(sulfooxy)ethyl]sulfonyl]propyl]amino]-5-pyrimidinyl]azo]-3-sulfophenyl] (9CI) (CA INDEX NAME)

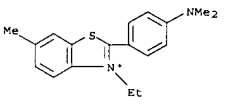


L10 ANSWER 46 OF 74 USPATFULL
ACCESSION NUMBER: 96:38732 USPATFULL
TITLE: Method for obtaining improved image contrast in migration imaging members
INVENTOR(S): Limburg, William W., Penfield, NY, United States
Mammino, Joseph, Penfield, NY, United States
Liebermann, George, Mississauga, Canada
Griffiths, Clifford H., Pittsford, NY, United States
Shahin, Michael M., Pittsford, NY, United States
Malhotra, Shadi L., Mississauga, Canada
Chen, Liqin, Mississauga, Canada
Perron, Marie-Eve, Mississauga, Canada
PATENT ASSIGNEE(S): Xerox Corporation, Stamford, CT, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5514505		19960507
APPLICATION INFO.:	US 1995-441360		19950515 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Martin, Roland
LEGAL REPRESENTATIVE: Byorick, Judith L.
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 7686
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed is a process which comprises (a) providing a migration imaging member comprising (1) a substrate and (2) a softenable layer comprising a softenable material and a photosensitive migration marking material present in the softenable layer as a monolayer of particles situated at or near the surface of the softenable layer spaced from the substrate; (b) uniformly charging the imaging member; (3) imagewise exposing the charged imaging member to activating radiation at a wavelength to which the migration marking material is sensitive; (d) subsequent to step (c), causing the softenable material to soften and enabling a first portion of the migration marking material to migrate through the softenable material toward the substrate in an imagewise pattern while a second portion of the migration marking material remains substantially unmigrated within the softenable layer; and (e) contacting the second portion of the migration marking material with a transparentizing agent which transparentizes migration marking material.
IT **179990-25-1**
(transparentizing agent for electrophotog. migration imaging members)
RN 179990-25-1 USPATFULL
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3-ethyl-6-methyl-, bromide (9CI) (CA INDEX NAME)

L10 ANSWER 46 OF 74 USPATFULL (Continued)



● Br⁻

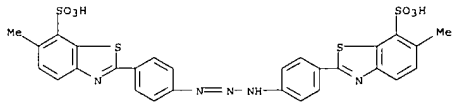
L10 ANSWER 47 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:633021 CAPLUS
DOCUMENT NUMBER: 123:217135
TITLE: Reactions of inorganic ions with organic reagents on microcrystalline cellulose and silica gel thin layers. I
AUTHOR(S): Soljic, Z.; Hrestak, Z.; Eskinja, I.
CORPORATE SOURCE: Faculty Chemical Engineering Technology, University Zagreb, Croatia
SOURCE: Kemija u Industriji (1995), 44(5), 219 34
CODEN: KJUIAR; ISSN: 0022 9830
PUBLISHER: Hrvatsko Drustvo Kemijskih Inzenjera i Tehnologa
DOCUMENT TYPE: Journal
LANGUAGE: Serbo Croatian

AB The formation of colored spots by reaction between inorg. cations and org. reagents on microcryst. cellulose and silica gel GF254 thin layers was studied. Thin layers were prepd. from aq. suspensions of the sorbents (cellulose:water = 1:1 and silica gel:water = 1:2.5); layers were dried at room temp.; solns. of salts (chlorides and nitrates) with concns. of cations 1 5 mg/mL were used as samples; reagents were dissolved in org. solvents, most frequently in ethanol, usually 0.1 g reagent in 100 mL solvent. One drop of cation soln. was spotted on cellulose layer and one on silica gel layer, spots were dried and both sprayed with the same reagent soln., and exposed to NH3 vapor (and sometimes to UV light). The results are presented in tables. Some reagents form colored spots with many cations, while others react only with a few. Differences between the reactions on cellulose and silica gel layers are were obsd.; most frequently, more colored spots were formed on the cellulose layer, although some reagents react conversely (e.g., bromothymol blue). The color of the spot on cellulose is often different from the color on silica gel. These phenomena show the active role of the sorbent in the reactions between inorg. ions and org. reagents. Some reactions were very sensitive, giving intense colors. Sometimes the spots were visible without being exposed to ammonia vapor, some spots could be perceived only under UV light (as with 8 hydroxyquinoline), colors of others disappeared after some time or could be changed, etc. Results of parallel behavior of inorg. ions on cellulose and silica gel thin layer can be applied in identification of ions (qual. anal.), in choosing suitable detection reagents in planar chromatog., esp. for direct quant. detn. on thin layers (the colors for all reagents are also given in the tables), and for choosing favorable reagents for detn. of ions by spectrophotometry. The results highlight the effect of cellulose and silica gel layers on the spot colors; the sorbent share in the of chromophore electron configuration is the result of interactions between cation and sorbent, reagent and cation, and reagent and sorbent.

IT **1829-00-1**, Titan yellow
RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study);

L10 ANSWER 47 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
RACT (Reactant or reagent); USES (Uses)
(reactions of inorg. cations with org. reagents on microcryst. cellulose and silica gel thin layers)

RN 1829 00 1 CAPLUS
CN 7 Benzothiazolesulfonic acid, 2,2' (1 triazene 1,3 diyldi 4,1 phenylene)bis[6 methyl , disodium salt (9CI) (CA INDEX NAME)



●2 Na

L10 ANSWER 48 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:239672 CAPLUS
DOCUMENT NUMBER: 120:239672
TITLE: Immunological detection using two detectable labels
INVENTOR(S): Abuknesha, Ramadan Arbi
PATENT ASSIGNEE(S): GEC Marconi Ltd., UK
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9403811	A1	19940217	WO 1993-GB1628	19930802
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
GB 2270976	A1	19940330	GB 1992 19743	19920918
GB 2260609	A1	19930421	GB 1992 21578	19921014
GB 2260609	B2	19960522		
GB 2261948	A1	19930602	GB 1992 24897	19921127
GB 2261949	A1	19930602	GB 1992 24898	19921127
EP 660935	A1	19950705	EP 1993 917968	19930802
EP 660935	B1	20000524		
R: DE, FR				
US 5723304	A	19980303	US 1995 381826	19950227

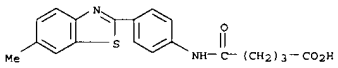
PRIORITY APPLN. INFO.:
GB 1992-16465 A 19920803
GB 1992 19743 A 19920918
GB 1992 20722 A 19921001
GB 1992-21578 A 19921014
GB 1992 24897 A 19921127
GB 1992 24898 A 19921127
GB 1991 22180 A 19911018
GB 1991 25204 A 19911127
GB 1991 25218 A 19911127
WO 1993 GB1628 W 19930802

AB A method of detection, sensor, and test kit for immunoassays are described which involve ratiometric detection of 2 detectable species which are detectable independently of one another and are influenced independently by the analyte. use an auxiliary **ligand** (e.g. an auxiliary antigen) and a binder (e.g. antibody) for the auxiliary **ligand** for ratiometric detection of 2 detectable species. This improves the accuracy and precision of measurement of a signal by avoiding abs. measurements, e.g. where one of the detectable species is influenced by the presence of the analyte while the other is not, and the 2 detectable species can be detected independently. Thus, in an immunoassay for L thyroxine, an antibody to thyroxine was conjugated with 5(6) carboxyfluorescein N hydroxysuccinimide ester. A 2nd antibody directed to 2 phenyl 4 quinolinecarboxylic acid was conjugated with thyroxine N amidoglutaric acid N hydroxysuccinimide ester and with 7 amino 4 methylcoumarin 3 propionic acid N hydroxysuccinimide ester. Polystyrene assay tubes coated with a 2 phenyl 4 quinolinecarboxylic acid ovalbumin conjugate received std. solns. or samples contg. thyroxine and fluorescein labeled primary antibody and then the 2nd antibody conjugate. After incubation and washing, the fluorescence bound to the tubes was measured at 510 nm (fluorescein) and 450 nm (7 amino 4 methylcoumarin). The fluorescence intensity for fluorescein increased with increasing thyroxine concn., whereas that for the coumarin remained relatively const. The ratios of the 2 fluorescence intensities was

L10 ANSWER 48 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
plotted as a function of thyroxine concn. for use as a calibration curve.

IT **154355-46-1**
RL: ANST (Analytical study)
(as auxiliary **ligand**, in immunoassay with multiple label detection)

RN 154355 46 1 CAPLUS
CN Pentanoic acid, 5 [[4 (6 methyl 2 benzothiazolyl)phenyl]amino] 5 oxo (9CI) (CA INDEX NAME)



L10 ANSWER 49 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:293590 CAPLUS
DOCUMENT NUMBER: 120:293590
TITLE: Separation method with auxiliary **ligand** binder pairs in immunological detection of multiple analytes
INVENTOR(S): Abuknesha, Ramadan Arbi
PATENT ASSIGNEE(S): GEC-Marconi Ltd., UK
SOURCE: PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9403807	A1	19940217	WO 1993-GB1627	19930802
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
GB 2270976	A1	19940330	GB 1992-19743	19920918
GB 2261948	A1	19930602	GB 1992-24897	19921127
GB 2261949	A1	19930602	GB 1992-24898	19921127
EP 653065	A1	19950517	EP 1993-917967	19930802
R: DE, FR				

PRIORITY APPLN. INFO.: GB 1992-16450 A 19920803
GB 1992-16683 A 19920806
GB 1992-19743 A 19920918
GB 1992-20722 A 19921001
GB 1992-24897 A 19921127
GB 1992-24898 A 19921127
GB 1991-25204 A 19911127
GB 1991-25218 A 19911127
WO 1993-GB1627 W 19930802

AB A sepn. method which finds application in immunol. detection, a method suitable for use in detection, a sensor, and a test kit are disclosed. The invention provides a sepn. method suitable for use in an immunol. method for the detection of >1 species, which includes the use of >1 auxiliary **ligand**-binder pairs, the auxiliary **ligand** of each of the plurality of auxiliary **ligand**-binder pairs being provided on a support material. The invention also provides a sepn. method which includes the use of a plurality of auxiliary **ligand**-binder pairs, an auxiliary **ligand** of one auxiliary **ligand**-binder pair being provided on a support material and a binder of another auxiliary **ligand**-binder pair, which pair comprises an auxiliary **ligand**-auxiliary binder pair, being provided on a support material. The invention is useful for detection of multiple analytes. 17.beta.-Estradiol, progesterone and L-thyroxine were selected as analytes to illustrate the use of >1 auxiliary **ligand**-auxiliary binder pairs in sepns. of multiple analytes for immunol. detection. The auxiliary **ligands** used were 7-hydroxy-4-methylcoumarin-3propionic acid, 2-(4-aminophenyl)-6-methylthiazole hemiglutarate, and 2-phenyl-4-quinoline carboxylic acid; auxiliary binders were antibodies to these **ligands**.

IT **154821-25-7**
RL: ANST (Analytical study)

L10 ANSWER 49 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
(as auxiliary **ligand**, antibody as auxiliary binder to, in sepn. in multiple analyte immunol. detection)
RN 154821-25-7 CAPLUS
CN Pentanedioic acid, compd. with 4-(6-methyl-2-benzothiazolyl)benzenamine (1:2) (9CI) (CA INDEX NAME)

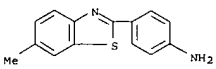
CM 1

CRN 110-94-1
CMF C5 H8 O4

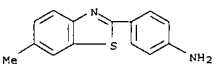
$HO_2C-(CH_2)_3-CO_2H$

CM 2

CRN 92-36-4
CMF C14 H12 N2 S



IT **92-36-4D**, ovalbumin conjugates
RL: ANST (Analytical study)
(for estradiol-progesterone-thyroxine immunoassay with auxiliary **ligand**-binder pairs)
RN 92-36-4 CAPLUS
CN Benzenamine, 4-(6-methyl-2 benzothiazolyl)- (9CI) (CA INDEX NAME)

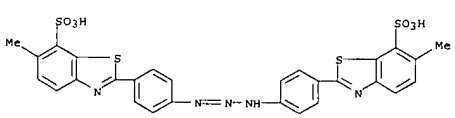


L10 ANSWER 50 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:168154 CAPLUS
DOCUMENT NUMBER: 120:168154
TITLE: Asbestos fibers modified with organic dyes
INVENTOR(S): Habashi, Fathi; Awadalla, Farouk; Page, Michel
PATENT ASSIGNEE(S): Universite Laval, Can.
SOURCE: Can., 16 pp.
CODEN: CAXXA4
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1319470	A1	19930629	CA 1988-556279	19880112

AB In order to reduce the hemolytic and cytotoxicity properties of chrysotile asbestos fibers, Mg ions in the fiber are **chelated** with 0.2-6 wt.% of org. dye. The dye is selected from hydroxyquinolines, acridines, azines, phenanthroline, phthalocyanine, anthraquinones, azo dyes, triphenylmethane, nitronaphthols, oximes, and diketones.

IT **1829-00-1**, Thiazol yellow
RL: RCT (Reactant); RACT (Reactant or reagent)
(**chelation** of, with magnesium ions in chrysotile asbestos fiber, for hemolytic and cytotoxicity properties redn.)
RN 1829-00-1 CAPLUS
CN 7-Benzothiazoleaulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)



● 2 Na

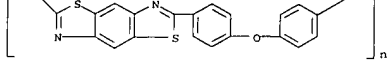
L10 ANSWER 51 OF 74 USPATFULL
ACCESSION NUMBER: 92:78944 USPATFULL
TITLE: Preparation of poly(benz(ox, imid, thi)azole) polymers
INVENTOR(S): Perry, Robert J., Pittsford, NY, United States
PATENT ASSIGNEE(S): Eastman Kodak Company, Rochester, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5149755		19920922
APPLICATION INFO.:	US 1991-726437		19910705 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Anderson, Harold D.
LEGAL REPRESENTATIVE: Walker, Robert Luke
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
LINE COUNT: 866
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

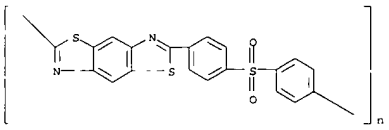
AB A method for the preparation of poly(benzoxazole)s, poly(benzimidazoles)s, and poly(benzthiazole)s. In the presence of solvent and catalyst, reacting carbon monoxide, an aromatic halide reactant having the general formula X.sup.1 --Ar.sup.1 --Z.sup.1 and an aromatic amine reactant having the general formula Z.sup.2 --Ar.sup.2 --M.sup.1, wherein X.sup.1 and Z.sup.1 are non-ortho, Z.sup.2 and M.sup.1 are non-ortho, one of Z.sup.1 and Z.sup.2 is X.sup.2 and the other one is M.sup.2, --Ar.sup.1 -- and --Ar.sup.2 -- are each independently selected from the group consisting of aromatic and heteroaromatic moieties having a total of ring carbons and heteroatoms of from 6 to about 20, X.sup.1 and X.sup.2 are each independently selected from the group consisting of --I and --Br, and M.sup.1 and M.sup.2 are each independently selected from moieties having an --NH.sub.2 radical and, ortho to the --NH.sub.2 radical, a radical selected from the group consisting of --NH.sub.2, --OH, and --SH.

IT **108389-04-4P 146185-39-9P**
(prepd. of, cured, catalysts for)
RN 108389-04-4 USPATFULL
CN Poly(benzo[1,2-d:4,5-d']bisthiazole-2,6-diyl-1,4-phenyleneoxy-1,4-phenylene) (9CI) (CA INDEX NAME)

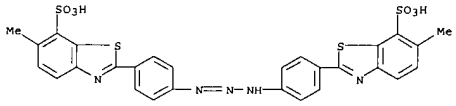


RN 146185-39-9 USPATFULL
CN Poly(benzo[1,2-d:4,5-d']bisthiazole-2,6-diyl-1,4-phenylenesulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)

L10 ANSWER 51 OF 74 USPATFULL (Continued)



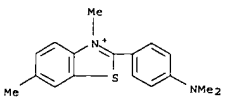
L10 ANSWER 52 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:419395 CAPLUS
DOCUMENT NUMBER: 117:19395
TITLE: Silica gel modified with titan yellow as a sorbent for
separation and preconcentration of trace amounts of heavy metals from alkaline earth or alkali metal salts
AUTHOR(S): Kocjan, Ryszard
CORPORATE SOURCE: Dep. Inorg. Anal. Chem., Med. Acad , Lublin, 20 081, Pol.
SOURCE: Analyst (Cambridge, United Kingdom) (1992), 117(4), 741 4
CODEN: ANALAO, ISSN: 0003 2654
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Sorption of 12 metal ions (Ca, Mg, Al, Cu, Fe(III), Ni, Co, Cd, Zn, Pb, HgII and CrIII) on silica gel impregnated with a mixt. of Aliquat 336 and Titan Yellow was investigated in the pH range 1 9. All these metals were retained from alk., neutral or slightly acidic aq. solns. except calcium and magnesium, which were retained only from alk. solns. All the retained metals can be eluted with dil. solns. of HClO4 (>0.05 mol L 1) or HCl (>0 5 mol L 1) without elution of the **chelating** reagent from the sorbent, which makes possible the use of the same column for a no. of sorption elution processes. The rate of sorption of Cu, Fe, Cr, Al, Zn, Ca dna Mg was also studied and it was found that relatively high flow rates (up to 4 mL min 1) could be used for solns. passing through the column. The sorbent was applied for the sepn. of solns. of anal. reagent sodium, potassium, calcium, magnesium and ammonium chloride, used as supporting electrolytes in anodic stripping voltammetry, from traces of Cu, Pb, Cd and Zn, and for sepn. of some metal ion mixts. by column extn. chromatog.
IT **1829-00-1**, Titan Yellow
RL: ANST (Analytical study)
(silica gel modified with, as stationary phase for sepn. and preconcn. of trace heavy metals from alk. earth or alkali metal salts)
RN 1829 00 1 CAPLUS
CN 7 Benzothiazolesulfonic acid, 2,2' (1 triazene 1,3 diyldi 4,1 phenylene)bis[6 methyl , disodium salt (9CI) (CA INDEX NAME)



● 2 Na

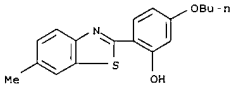
L10 ANSWER 52 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)

L10 ANSWER 53 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:40794 CAPLUS
DOCUMENT NUMBER: 118:40794
TITLE: Well defined colloidal pigments. II. Monodispersed inorganic spherical particles containing organic dyes
AUTHOR(S): Hsu, Wan Peter; Yu, Rongchi; Matijevic, Egon
CORPORATE SOURCE: Cent. Adv. Mater. Process., Clarkson Univ., Potsdam, NY, 13699 5814, USA
SOURCE: Dyes and Pigments (1992), 19(3), 179 201
CODEN: DYPIDX; ISSN: 0143 7208
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Colloidal pigments of well defined characteristics were obtained by using inorg. particles as carriers in which org. dyes were either incorporated or adsorbed. The copptn. of inorg. salts with water sol. anionic dyes was affected by the **chelating** ability of the latter, the valence of the metal, and the reaction parameters during the particle formation. The dye retention in the core was similar to that in the mordant process of dyeing. Optical studies of the pigments made by using Y(OH)CO3 as a core showed good color properties (purity, lightness) in a variety of hues. The amt. of cationic dyes adsorbed on silica particles depended on the mol. structure of the dyes and on the pH of the solns., which influenced the surface charge of the SiO2.
IT **2390-54-7**, Thioflavine T
RL: PRP (Properties)
(pigments, on inorg. hydrosol carriers)
RN 2390 54 7 CAPLUS
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)

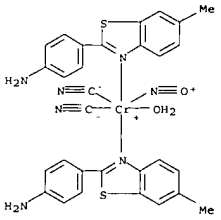


● Cl

L10 ANSWER 54 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:652432 CAPLUS
DOCUMENT NUMBER: 117:252432
TITLE: **Chelate** complex-forming agents for the deactivation of copper in photocrosslinked LDPE
AUTHOR(S): Schipschack, Klaus; Berger, Joerg; Neumann, Renate; Wagner, Harald
CORPORATE SOURCE: Zentralinst. Festkoerperphys. Werkstofforsch., Dresden, O-8027, Germany
SOURCE: Angewandte Makromolekulare Chemie (1992), 199, 103-17
CODEN: ANMCBO; ISSN: 0003-3146
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Complex-forming agents for Cu, of interest as reagents in anal. chem. and for liq.-liq. extn., were tested with regard to their effectiveness as Cu deactivators in crosslinked low-d. polyethylene (XLDPE) by detg. the induction period in the O uptake of XLDPE/Cu/XLDPE-sandwiches at 165.degree.. Besides acylated hydrazines, a class of substances already known for efficient metal deactivation, several groups of **chelating** agents were investigated. Above all, the 2-(2-hydroxyphenyl)imidazoles turned out to be efficient Cu deactivators in XLDPE. Compared to them, the 2-(2-hydroxyphenyl)oxazole, -thiazole, and -oxadiazole with very similar chem. structure but without mobile H at the 5-membered ring are ineffective.
IT **88016-72-2**
RL: PROC (Process)
(evaluation of, for copper deactivation in crosslinked low-d. polyethylene)
RN 88016-72-2 CAPLUS
CN Phenol, 5-butoxy-2-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

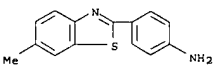


L10 ANSWER 55 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:640346 CAPLUS
DOCUMENT NUMBER: 119:240346
TITLE: Magneto, spectral and thermal studies of some mixed-**ligand** cyanonitrosyl chromium (CrNO)5 complexes involving benzothiazole derivatives
AUTHOR(S): Maurya, R. C.; Mishra, D. D.; Khan, I. B.; Awasthi, S.
CORPORATE SOURCE: Dep. P.G. Stud. Res. Chem., R.D. Univ., Jabalpur, 482 001, India
SOURCE: Journal of the Institution of Chemists (India) (1992),
64(1), 7-8
CODEN: JOICA7; ISSN: 0020-3254
DOCUMENT TYPE: Journal
LANGUAGE: English
AB [Cr(NO)(CN)2L2(H2O)] (L = 2-amino-6-ethoxy-, 2-amino-4-chloro-, 2-amino-6-nitro-, 2-amino-5,6-dimethyl-, 2-(2-tolyl)-, 2-(4-aminophenyl)-6-methylbenzothiazoles) were prepd. and characterized by elemental anal., magnetic, molar conductance, TGA, and IR and ESR spectral methods. The benzothiazoles act as monodentate **ligands** coordinating through tertiary N.
IT **151007-63-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 151007-63-5 CAPLUS
CN Chromium, aquabis(cyano-C)bis[4-(6-methyl-2-benzothiazolyl)benzenamine-N4]nitrosyl- (9CI) (CA INDEX NAME)



IT **92-36-4**, 2-(4-Aminophenyl)-6-methylbenzothiazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chromium cyano nitrosyl complex anion)
RN 92-36-4 CAPLUS
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)

L10 ANSWER 55 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



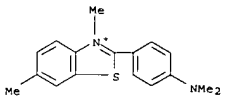
L10 ANSWER 56 OF 74 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1991:223612 BIOSIS
DOCUMENT NUMBER: BA91:115072
TITLE: DEMONSTRATION OF ELASTIC FIBERS WITH REAGENTS FOR DETECTION OF MAGNESIUM.
AUTHOR(S): MUELLER W; FIRSCHING R
CORPORATE SOURCE: GULDENWEG 15, D-5000 KOELN 40, FRG.
SOURCE: J ANAT, (1991) 175 (0), 195-202.
CODEN: JOANAY. ISSN: 0021-8782.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB The elastic fibers in various human and animal tissues investigated with the reagents quinalizarin, magneson II, and titan yellow for the detection of magnesium revealed instantly striking positive results. On the supposition of sufficient amount of magnesium in elastic fibers for histochemical detection it is speculated that the marked **chelate**-forming ability of magnesium or its antagonistic function to calcium is associated with the elastic property of the fibers.

L10 ANSWER 57 OF 74 USPATFULL
ACCESSION NUMBER: 90:21538 USPATFULL
TITLE: Heat sensitive recording material
INVENTOR(S): Satake, Toshimi, Tokyo, Japan
Minami, Toshiaki, Tokyo, Japan
Nagai, Tomoaki, Tokyo, Japan
Fujimura, Fumio, Tokyo, Japan
PATENT ASSIGNEE(S): Jujo Paper Co., Ltd., Tokyo, Japan (non U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4910185		19900320
APPLICATION INFO.:	US 1988 158544		19880222 (7)

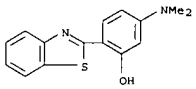
	NUMBER	DATE
PRIORITY INFORMATION:	JP 1987 42424	19870225

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Hess, Bruce H.
LEGAL REPRESENTATIVE: Koda & Androlia
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 470
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A heat sensitive recording material including a support and a color developing layer comprising an electron doner, an electron acceptor and a fluorescence dyestuff and/or pigment. The heat sensitive recording material is superior in both readability in an irradiation of UV ray and optical readability in near infrared region.
IT **2390-54-7**
(thermal recording material contg.)
RN 2390 54 7 USPATFULL
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)



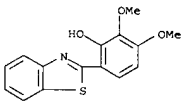
● Cl

L10 ANSWER 58 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:469991 CAPLUS
DOCUMENT NUMBER: 113:69991
TITLE: Oxo bridged complexes of iron(III) derived from 2 (2' hydroxyphenyl)benzothiazole and 2 (2' hydroxyphenyl)benzimidazole **ligands**
AUTHOR(S): Wahlgren, Curtis G.; Addison, Anthony W.; Burman, Sudhir; Thompson, Laurence K.; Sinn, Ekkehard; Rowe, Theresa M.
CORPORATE SOURCE: Chem. Dep., Drexel Univ., Philadelphia, PA, 19104, USA
SOURCE: Inorganica Chimica Acta (1989), 166(1), 59 69
CODEN: ICHAA3; ISSN: 0020 1693
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fe(III) complexes of substituted 2 (2' hydroxyphenyl)benzothiazole (PBT) and 2 (2' hydroxyphenyl)benzimidazole (PBI) **ligands** were prepd. These have mostly been characterized as oxo bridged compds. by their magnetic susceptibility and ESR behavior with a general formula [Fe(L)2]2O. Most of the compds. have limited soly., with the methoxy and dimethylamino substituted analogs being somewhat more sol. Diffuse reflectance spectra and soln. optical spectra indicate some effect of **ligand** basicity on the position of the phenolate to Fe(III) charge transfer band with electron releasing substituents on the **ligands** shifting this band to lower energy. In the benzimidazole complex this band was shifted to higher energy relative to its benzothiazole counterpart. Electrochem. studies show irreversible electron transfer and indicate a stabilization of the Fe(III) oxidn. state relative to Fe(II) by electron releasing substituents on the **ligand**. Temp. dependent magnetic susceptibility reveals that most of the compds. are strongly antiferromagnetically coupled.
IT **90481-41-7P 127941-93-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 90481 41 7 CAPLUS
CN Phenol, 2 (2 benzothiazolyl) 5 (dimethylamino) (9CI) (CA INDEX NAME)



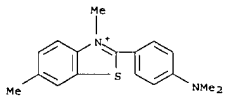
RN 127941 93 9 CAPLUS
CN Phenol, 6 (2 benzothiazolyl) 2,3 dimethoxy (9CI) (CA INDEX NAME)

L10 ANSWER 58 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



L10 ANSWER 59 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:433838 CAPLUS
DOCUMENT NUMBER: 109:33838
TITLE: Model for competitive adsorption of organic cations on clays
AUTHOR(S): Margulies, L.; Rozen, H.; Nir, S.
CORPORATE SOURCE: Fac. Agric., Hebrew Univ., Rehovot, 76 100, Israel
SOURCE: Clays and Clay Minerals (1988), 36(3), 270-6
CODEN: CLCMAB; ISSN: 0009 8604
DOCUMENT TYPE: Journal
LANGUAGE: English
AB With a view to photostabilizing photolabile pesticides by coadsorption on a clay surface with an org. cation acting as energy acceptor, the adsorption on Na montmorillonite of 2 monovalent org. cations, methylene blue (MB) and thioflavin T (TFT), was studied in 4 different situations: (1) sep. adsorption of MB or TFT; (2) competitive adsorption of TFT and Cs; (3) competitive adsorption of the 2 org. cations from their equimolar solns.; and (4) adsorption of TFT on a clay whose cation-exchange capacity (CEC) had been previously satd. with MB. MB and TFT adsorbed to as much as 120% and 140% of the CEC, resp. Cs did not appear to compete with TFT for the adsorption sites of the clay. TFT mols. adsorbed more strongly than those of MB and displaced them from the clay surface. A model was developed to evaluate the strength of the clay org. cation interactions. The specific binding of the cations to the neg. charged surface, detd. by solving the electrostatic equations, appears to account for adsorption exceeding the CEC and formation of pos. charged complexes, which are due to noncoulombic interactions between the org. **ligands**. The charge reversal predicted by the model beyond the CEC of the clay was confirmed by microelectrophoretic expts. Particles in a sample of montmorillonite loaded with 50 mequiv TFT/100 g clay moved to the pos. electrode, whereas in samples contg. the 2 dyes, MB and TFT, coadsorbed at a total concn. of 100 120 mequiv/100 g clay, the particles moved to the neg. electrode. Binding coeffs. describing the formation of neutral and charged complexes of TFT and the clay were larger than those for MB and the clay, thereby explaining the preferential adsorption of TFT obsd. exptl. The binding coeffs. for the formation of neutral complexes of either MB and TFT and the clay were more than 6 orders of magnitude larger than those previously reported for inorg. monovalent cations.
IT **2390-54-7**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(adsorption of, on montmorillonite, pesticide photostabilization in relation to)
RN 2390-54 7 CAPLUS
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)

L10 ANSWER 59 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



● Cl

L10 ANSWER 60 OF 74 USPATFULL

ACCESSION NUMBER: 87:79587 USPATFULL
TITLE: Removable guidepath for automated guidance vehicles
INVENTOR(S): Paske, Jr., Richard, Holland, MI, United States
Pallmer, Michael, Holland, MI, United States
King, Jr., William L., Holland, MI, United States
PATENT ASSIGNEE(S): Bell & Howell Company, Chicago, IL, United States (U.S. corporation)

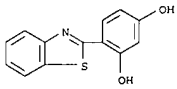
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4707297		19871117
APPLICATION INFO.:	US 1986 857729		19860429 (6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Demers, Arthur P.
LEGAL REPRESENTATIVE: Mason, Kolehmainen, Rathburn & Wyss
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
LINE COUNT: 892
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB An aqueous guidepath coating composition includes a fluorescent dye, and an acrylic ionomer, and is particularly useful in positional control of and positional detection by stimulated emission guided Automated Guidance Vehicles (AGV). This coating, used to mark the actual position of the guidance track to be followed by the AGV, affords unexpected improvements over previous guidepath compositions in removal and reapplication characteristics, in post application durability and in substrate aesthetics.

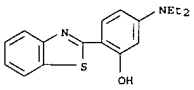
IT **6265-56-1 55489-32-2 90481-41-7 90481-46-2**
(guidepath compns. contg. reversibly crosslinked ionomers and, for automated guidance vehicles)

RN 6265 56 1 USPATFULL
CN 1,3 Benzenediol, 4 (2 benzothiazolyl) (9CI) (CA INDEX NAME)

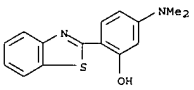


RN 55489 32 2 USPATFULL
CN Phenol, 2 (2 benzothiazolyl) 5 (diethylamino) (9CI) (CA INDEX NAME)

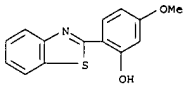
L10 ANSWER 60 OF 74 USPATFULL (Continued)



RN 90481 41 7 USPATFULL
CN Phenol, 2 (2 benzothiazolyl) 5 (dimethylamino) (9CI) (CA INDEX NAME)



RN 90481 46 2 USPATFULL
CN Phenol, 2 (2 benzothiazolyl) 5 methoxy (9CI) (CA INDEX NAME)



L10 ANSWER 61 OF 74 USPATFULL

ACCESSION NUMBER: 87:34075 USPATFULL
TITLE: Fluorescent gram stain
INVENTOR(S): Mansour, James D., Raleigh, NC, United States
PATENT ASSIGNEE(S): Becton, Dickinson and Company, Franklin Lakes, NJ, United States (U.S. corporation)

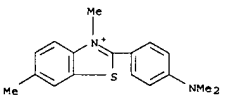
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4665024		19870512
APPLICATION INFO.:	US 1984 656627		19841001 (6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Warden, Robert J.
ASSISTANT EXAMINER: Krawczewicz, L.
LEGAL REPRESENTATIVE: Brown, Richard E.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 490
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method to determine the Gram sign of microorganisms includes staining the microorganisms with a plurality of fluorescent dyes, applying excitation energy to the stained microorganisms, and observing the color of the fluorescence emission of the stained microorganisms. Gram positive and Gram negative microorganisms stain different colors, and assignment of the Gram sign may be made on the basis of the color of the stained microorganisms.

IT **2390-54-7**, Thioflavin T
(microorganism staining with, for gram sign detn.)

RN 2390 54 7 USPATFULL
CN Benzothiazolium, 2 [4 (dimethylamino)phenyl] 3,6 dimethyl , chloride (9CI)
(CA INDEX NAME)



● Cl

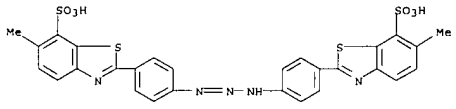
L10 ANSWER 62 OF 74 USPATFULL
ACCESSION NUMBER: 86:71530 USPATFULL
TITLE: Test system and procedure for the determination of NAD (P) H
INVENTOR(S): Limbach, Berthold, Seeheim, Germany, Federal Republic of
Helger, Roland, Darmstadt, Germany, Federal Republic of
PATENT ASSIGNEE(S): Merck Patent Gesellschaft mit beschrankter Haftung, Darmstadt, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4629697		19861216
APPLICATION INFO.:	US 1983-564866		19831223 (6)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1982-3247894	19821224

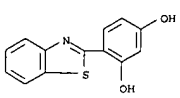
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Marantz, Sidney
ASSISTANT EXAMINER: Foulke, Cynthia Lee
LEGAL REPRESENTATIVE: Millen & White
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1,15
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 470
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A test system having an extended range of measurement and an appropriate procedure for the determination of NAD(P)H or of substrates or enzymes which react to form or consume NAD(P)H in fluids is provided. The test system contains, at one and the same time, several substances acting independently of one another as electron acceptors with respect to NAD(P)H and having different electrochemical potentials. Addition of the test system to the sample solution gives rise to different end products which can be analytically differentiated and which are evaluated visually or by other techniques of measurement.
IT **1829-00-1**
(in detn. of NAD(P)H and NAD(P)H-utilizing enzymes and their substrates)
RN 1829-00-1 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 62 OF 74 USPATFULL (Continued)

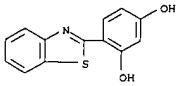


●2 Na

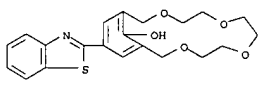
L10 ANSWER 63 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:428147 CAPLUS
DOCUMENT NUMBER: 103:28147
TITLE: Complexes with organic **ligands**. Stability constants of copper(II), cobalt(II), nickel(II), and zinc(II) **chelate** compounds of hydroxy-substituted 2-arylbenzazoles and 2-arylimidazopyridines
AUTHOR(S): El'tsov, A. V.; Rudaya, L. I.; Samartseva, E. D.; Kvitko, I. Ya.; Tret'yakov, A. V.
CORPORATE SOURCE: USSR
SOURCE: Deposited Doc. (1984), VINITI 3295-84, 10 pp.
Avail.: VINITI
DOCUMENT TYPE: Report
LANGUAGE: Russian
AB Acid dissocn. and metal complexation consts. were detd. for 4 2-(2-hydroxyphenyl)benzimidazoles, 4 (2-(2-hydroxyphenyl)benzthiazoles, 4 2-(2-hydroxyphenyl)imidazo[4,5-c]pyridimes, and 2 2-(2-hydroxyphenyl)imidazo[4,5-b]pyridines in aq. dioxane. Complex stabilities follow the Irving-Williams trend (Co2+ < Ni2+ < Cu2+ > Zn2+). Substituent effects on complex stabilities are discussed.
IT **6265-56-1DP**, transition metal complexes
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in aq. dioxane)
RN 6265-56-1 CAPLUS
CN 1,3-Benzenediol, 4-(2-benzothiazolyl)- (9CI) (CA INDEX NAME)



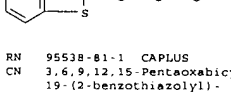
IT **6265-56-1**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(ionization of, in aq. dioxane)
RN 6265-56-1 CAPLUS
CN 1,3-Benzenediol, 4-(2-benzothiazolyl)- (9CI) (CA INDEX NAME)



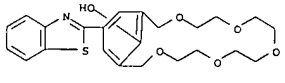
L10 ANSWER 64 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1985:132013 CAPLUS
DOCUMENT NUMBER: 102:132013
TITLE: Synthetic macrocyclic **ligands**. VI. Lithium ion-selective fluorescent emission with crowned benzo- and naphthothiazolylphenols
AUTHOR(S): Tanigawa, Isamu; Tsuemoto, Kiyoka; Kaneda, Takahiro; Misumi, Soichi
CORPORATE SOURCE: Inst. Sci. Ind. Res., Osaka Univ., Osaka, 567, Japan
SOURCE: Tetrahedron Lett. (1984), 25(46), 5327-30
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The fluorescent crowned benzo- and naphthothiazolylphenols I (R = 2-benzothiazolyl naphtho[1,2-d]thiazol-2-yl; n = 1-4) ion-selective fluorescent emission is obsd. under certain conditions.
IT **93675-98-0P 95538-80-0P 95538-81-1P**
95538-82-2P 95538-83-3P 95538-84-4P
95538-86-6P 95538-87-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and complexation of, with lithium salts, fluorescence in)
RN 93675-98-0 CAPLUS
CN 3,6,9,12-Tetraoxabicyclo[12.3.1]octadeca-1(18),14,16-trien-18-ol, 16-(2-benzothiazolyl)- (9CI) (CA INDEX NAME)



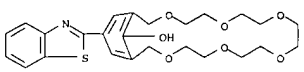
RN 95538-80-0 CAPLUS
CN 3,6,9-Trioxabicyclo[9.3.1]pentadeca-1(15),11,13-trien-15-ol, 13-(2-benzothiazolyl)- (9CI) (CA INDEX NAME)



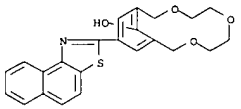
RN 95538-81-1 CAPLUS
CN 3,6,9,12,15-Pentaoxabicyclo[15.3.1]heneicosa-1(21),17,19-trien-21-ol, 19-(2-benzothiazolyl)- (9CI) (CA INDEX NAME)



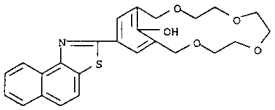
L10 ANSWER 64 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 95538 82 2 CAPLUS
CN 3,6,9,12,15,18 Hexaoxabicyclo[18.3.1]tetracosa 1(24),20,22 trien 24 ol, 22 (2 benzothiazolyl) (9CI) (CA INDEX NAME)



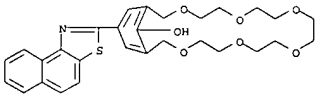
RN 95538 83 3 CAPLUS
CN 3,6,9 Trioxabicyclo[9.3.1]pentadeca 1(15),11,13 trien 15 ol, 13 naphtho[1,2 d]thiazol 2 yl (9CI) (CA INDEX NAME)



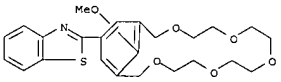
RN 95538 84 4 CAPLUS
CN 3,6,9,12 Tetraoxabicyclo[12.3.1]octadeca 1(18),14,16 trien 18 ol, 16 naphtho[1,2 d]thiazol 2 yl (9CI) (CA INDEX NAME)



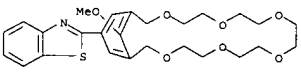
RN 95538 86 6 CAPLUS
CN 3,6,9,12,15,18 Hexaoxabicyclo[18.3.1]tetracosa 1(24),20,22 trien 24 ol, 22 naphtho[1,2 d]thiazol 2 yl (9CI) (CA INDEX NAME)



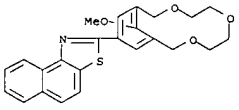
L10 ANSWER 64 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



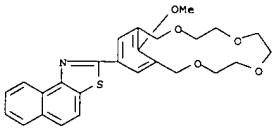
RN 95538 75 3 CAPLUS
CN Benzothiazole, 2 (24 methoxy 3,6,9,12,15,18 hexaoxabicyclo[18.3.1]tetracosa 1(24),20,22 trien 22 yl) (9CI) (CA INDEX NAME)



RN 95538 76 4 CAPLUS
CN Naphtho[1,2 d]thiazole, 2 (15 methoxy 3,6,9 trioxabicyclo[9.3.1]pentadeca 1(15),11,13 trien 13 yl) (9CI) (CA INDEX NAME)

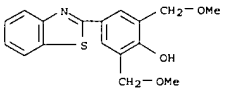


RN 95538 77 5 CAPLUS
CN Naphtho[1,2 d]thiazole, 2 (18 methoxy 3,6,9,12 tetraoxabicyclo[12.3.1]octadeca 1(18),14,16 trien 16 yl) (9CI) (CA INDEX NAME)

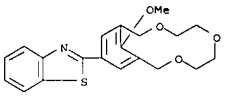


RN 95538 78 6 CAPLUS
CN Naphtho[1,2 d]thiazole, 2 (21 methoxy 3,6,9,12,15 pentaoxabicyclo[15.3.1]heneicosa 1(21),17,19 trien 19 yl) (9CI) (CA INDEX NAME)

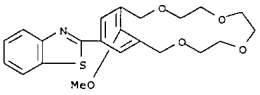
L10 ANSWER 64 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 95538 87 7 CAPLUS
CN Phenol, 4 (2 benzothiazolyl) 2,6 bis(methoxymethyl) (9CI) (CA INDEX NAME)



IT **95538-72-0P 95538-73-1P 95538-74-2P**
95538-75-3P 95538-76-4P 95538-77-5P
95538-78-6P 95538-79-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and demethylation of)
RN 95538 72 0 CAPLUS
CN Benzothiazole, 2 (15 methoxy 3,6,9 trioxabicyclo[9.3.1]pentadeca 1(15),11,13 trien 13 yl) (9CI) (CA INDEX NAME)

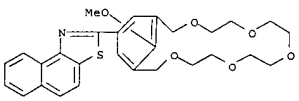


RN 95538 73 1 CAPLUS
CN Benzothiazole, 2 (18 methoxy 3,6,9,12 tetraoxabicyclo[12.3.1]octadeca 1(18),14,16 trien 16 yl) (9CI) (CA INDEX NAME)

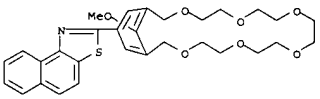


RN 95538 74 2 CAPLUS
CN Benzothiazole, 2 (21 methoxy 3,6,9,12,15 pentaoxabicyclo[15.3.1]heneicosa 1(21),17,19 trien 19 yl) (9CI) (CA INDEX NAME)

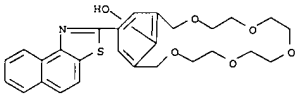
L10 ANSWER 64 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



RN 95538 79 7 CAPLUS
CN Naphtho[1,2 d]thiazole, 2 (24 methoxy 3,6,9,12,15,18 hexaoxabicyclo[18.3.1]tetracosa 1(24),20,22 trien 22 yl) (9CI) (CA INDEX NAME)



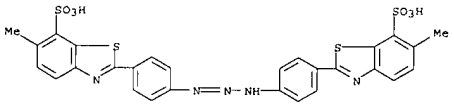
IT **95538-85-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 95538 85 5 CAPLUS
CN 3,6,9,12,15 Pentaoxabicyclo[15.3.1]heneicosa 1(21),17,19 trien 21 ol, 19 naphtho[1,2 d]thiazol 2 yl (9CI) (CA INDEX NAME)



L10 ANSWER 65 OF 74 USPATFULL
ACCESSION NUMBER: 82:27670 USPATFULL
TITLE: Continuous release of reagent in an analytical element to reduce assay interference
INVENTOR(S): Sanford, Karl J., Rochester, NY, United States
Eikenberry, Jon N., Rochester, NY, United States
PATENT ASSIGNEE(S): Eastman Kodak Company, Rochester, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4333733		19820608
APPLICATION INFO.:	US 1980-169704		19800717 (6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Turk, Arnold
LEGAL REPRESENTATIVE: Hawley, J. Jeffrey
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 25
LINE COUNT: 1021
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Analytical elements and methods for the selective determination of an analyte in aqueous fluids containing the analyte. These elements and methods feature means for continuously releasing chromogenic indicator reagent from a reagent zone to a reaction zone. The continuous release means is responsive to the application of a sample of the fluid to continuously release reagent into the reaction zone at a rate producing color response corresponding to interaction of the indicator with the analyte and reduced interaction of the indicator with interferents. In preferred embodiments, albumin is determined in the presence of interfering proteins such as globulins using buffered chromogenic indicator reagent. In such embodiments, when protein interferents are present, their interference can be substantially eliminated for up to three minutes, during which time color response is substantially only from the interaction of albumin and reagent. The determination of albumin follows from such color response.
IT **1829-00-1**
(as indicator, in multilayered test elements for body fluid anal.)
RN 1829-00-1 USPATFULL
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)



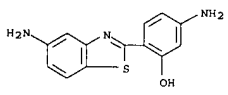
●2 Na

L10 ANSWER 65 OF 74 USPATFULL (Continued)

L10 ANSWER 66 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:23084 CAPLUS
DOCUMENT NUMBER: 92:23084
TITLE: Study of IR spectra of poly(hydroxyphenylbenzazole terephthalamides) and their complexes with metals
AUTHOR(S): Litovchenko, G. D.; Kolot, V. N.; Kudryavtsev, G. I.
CORPORATE SOURCE: USSR
SOURCE: Khim. Volokna (1979), (4), 24-6
CODEN: KVLKA4; ISSN: 0023-1118
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Changes in the IR spectra of heterocyclic polyamides confirm their crystn.
during heating and the formation of internal complexes on **chelation** with transition metals.
IT **72401-24-2**
RL: USES (Uses)
(IR of, heat and **chelation** effect on)
RN 72401-24-2 CAPLUS
CN 1,4-Benzenedicarboxylic acid, polymer with 5-amino-2-(5-amino-2-benzothiazolyl)phenol (9CI) (CA INDEX NAME)

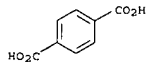
CM 1

CRN 72401-23-1
CMF C13 H11 N3 O S



CM 2

CRN 100-21-0
CMF C8 H6 O4



L10 ANSWER 67 OF 74 USPATFULL
ACCESSION NUMBER: 78:732 USPATFULL
TITLE: Process for the preparation of printing forms
INVENTOR(S): Lind, Erwin, Auringen, Germany, Federal Republic of
Freimuth, Franz, Wiesbaden-Biebrich, Germany, Federal Republic of
PATENT ASSIGNEE(S): Hoechst Aktiengesellschaft, Germany, Federal Republic of (non-U.S. corporation)

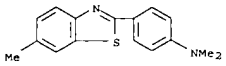
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4066453		19780103
APPLICATION INFO.:	US 1976-692154		19760602 (5)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1974-466069, filed on 1 May
1974, now abandoned

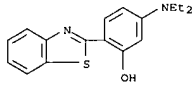
	NUMBER	DATE
PRIORITY INFORMATION:	DE 1973-2322047	19730502

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Martin, Jr., Roland E.
LEGAL REPRESENTATIVE: Bryan, James E.
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 564
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention relates to an improvement in the process for the preparation of printing forms or metallic etchings from electrophotographic or electrographic reproduction materials composed of
a support with a photoconductive or high-ohmic layer thereon, by charging and image-wise exposure, or by image-wise charging, development
of the electrostatic image with a finely-divided toner, fixing, and removal of the layer in the image-free areas by means of a decoating solution, the improvement comprising developing the electrostatic image with a developer which reacts at least superficially with the image areas at room temperature, thereby simultaneously effecting development and resistance to the decoating solution, or developing the electrostatic image with a developer which reacts with the decoating solution and thereby deactivates it in the image areas.
IT **56765-01-6**
(electrophotog. compns. contg., for developing images with reactive toners for printing plates)
RN 56765-01-6 USPATFULL
CN Benzothiazolesulfonamide, 2-[4-(dimethylamino)phenyl]-N,N,6-trimethyl- (9CI) (CA INDEX NAME)

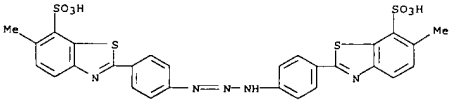
L10 ANSWER 67 OF 74 USPATFULL (Continued)



L10 ANSWER 68 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1979:438673 CAPLUS
DOCUMENT NUMBER 91:38673
TITLE IR spectra and calculation of the pi electron structure of some thiazolylazo compounds
AUTHOR(S): Olenovich, N. L.; Tantsyura, G. F.; Lozitskaya, E. P.; Savenko, G. I.; Malakhova, N. M.
CORPORATE SOURCE: Odess. Univ., Odessa, USSR
SOURCE Vopr. Stereokhim. (1978), 7, 62-7
CODEN: VSTKB9; ISSN: 0372-6762
DOCUMENT TYPE Journal
LANGUAGE: Russian
AB I, II, III and the corresponding 1-substituted 2-naphthols and 6-substituted 3-Et2NC6H4OH analogs existed in 2 tautomeric forms, as shown by IR and MO calcns. With metals the compds. acted as tridentate **ligands** and formed 2 rings.
IT **55489-32-2**
RL: PRP (Properties)
(tautomerization and complexing properties of, IR and MO calcns. in relation to)
RN 55489-32-2 CAPLUS
CN Phenol, 2-(2-benzothiazolyl)-5-(diethylamino)- (9CI) (CA INDEX NAME)



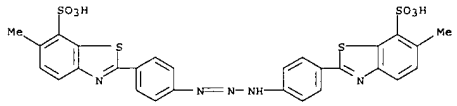
L10 ANSWER 69 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1977:576993 CAPLUS
DOCUMENT NUMBER: 87:176993
TITLE: Use of diphenyl guanidine as a component of complexes with different **ligands** of Group II and III elements
AUTHOR(S): Beschetnova, E. T.; Anisimova, L. G.; Tataev, O. A.; Malinovskaya, L. N.
CORPORATE SOURCE: Dagest. Gos. Univ., Makhachkala, USSR
SOURCE: Fiz. Khim. Metody Anal. Kontrolya Proizvod., Mezhvuz. Sb. (1976), 2, 40-7
CODEN: FKMSD6
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The sensitivity of spectrophotometric detn. of many Group II and III metals with colored reagents increased 2-3 fold by addn. of diphenylguanidine as a 2nd **ligand** and measuring the absorbance of the ternary complexes extd. into BuOH. The optimum complexation pH, metal **ligand** ratios, absorption max., and molar absorptivities are given for complexes of Be, Cd, Hg, Al, Ga, In, Tl, Sc, Y, and La with Xylenol Orange, Methylthymol Blue, Glycinecresol Red, glycine thymol blue, chromazurol, bromopyrogallol red, Alizarin Red, Acid Chrome Dark Blue, and Titan Yellow.
IT **1829-00-1**
RL: ANST (Analytical study)
(in detn. of mercury by extn. and spectrophometry)
RN 1829-00-1 CAPLUS
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

IT **1829-00-1D**, mercury complexes
RL: PRP (Properties)
(spectra of)
RN 1829-00-1 CAPLUS
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)

L10 ANSWER 69 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



●2 Na

L10 ANSWER 70 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1975:539863 CAPLUS
DOCUMENT NUMBER: 83:139863
TITLE: Printing plate development
INVENTOR(S): Lind, Erwin; Freimuth, Franz
PATENT ASSIGNEE(S): Kalle A.-G., Ger.
SOURCE: Ger. Offen., 26 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2322047	A1	19741107	DE 1973-2322047	19730502
DE 2322047	B2	19770414		
NL 7404998	A	19741105	NL 1974-4998	19740411
SE 397011	B	19771010	SE 1974-5643	19740426
BE 814363	A1	19741029	BE 1974-143762	19740429
FR 2227953	A1	19741129	FR 1974-14842	19740429
BR 7403472	A0	19741224	BR 1974-3472	19740429
US 3881864	A	19750506	US 1974-465342	19740429
AU 7468373	A1	19751030	AU 1974-68373	19740429
IT 1011291	A	19770120	IT 1974 50669	19740429
AT 7403531	A	19770815	AT 1974-3531	19740429
CH 590502	A	19770815	CH 1974-5855	19740429
CA 1046866	A1	19790123	CA 1974-198311	19740429
ES 425860	A1	19760616	ES 1974-425860	19740430
GB 1465927	A	19770302	GB 1974-18901	19740430
ZA 7402780	A	19750430	ZA 1974-2780	19740501
BE 814459	A1	19740902	BE 1974-143841	19740502
DE 2421249	A1	19741114	DE 1974-2421249	19740502
JP 50019509	A2	19750301	JP 1974-49664	19740502
JP 59007099	B4	19840216		
JP 50027806	A2	19750322	JP 1974-48858	19740502
AU 7468506	A1	19751106	AU 1974-68506	19740502
IT 1018650	A	19771020	IT 1974-50752	19740502
NL 7405949	A	19741105	NL 1974-5949	19740503
FR 2228206	A1	19741129	FR 1974-15412	19740503
ES 425932	A1	19760701	ES 1974-425932	19740503
US 4066453	A	19780103	US 1976-692154	19760602
AT 7605222	A	19771015	AT 1976-5222	19760715
AT 343149	B	19780510	AT 1976-5223	19760715

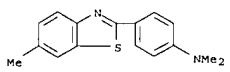
PRIORITY APPLN. INFO.: DE 1973-2322047 19730502
GB 1973-21104 19730503
SE 1974-5663 19740426
AT 1974-3531 19740429
US 1974-466069 19740501

AB To avoid the need of heat-fixation and thus minimize dimensional changes of electrostatic images for offset and gravure plates, a toner is used which forms a salt, **chelate**, or other complex with a constituent of the recording material or with the stripping agent, thus rendering the image hydrophobic and insol. in the liq. developers. The suitable toners include polyvalent metal salts for acid polymers, triphenylmethane dyes or diazonium salts for phenolic resins, benzoquinone for oxazole photoconductors and H3BO3 for alk. stripping solns. Thus, for a grained

L10 ANSWER 70 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
100 .mu. Al plate coated with 2,5-bis(4-diethylaminophenyl)-1,3,4-oxadiazole as photoconductor and a styrene-maleic anhydride copolymer as binder, a dispersion of 3 g MgSO4 in 1200 ml of an isoparaffin contg. 7.5 g of a pentaerythritol ester resin was used as the developer.

IT **56765-01-6**
RL: USES (Uses)
(electrophotog. compns. contg., for developing images with reactive toners for printing plates)

RN 56765-01-6 CAPLUS
CN Benzothiazolesulfonamide, 2 [4 (dimethylamino)phenyl] N,N,6-trimethyl (9CI) (CA INDEX NAME)



L10 ANSWER 71 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1974:97596 CAPLUS
DOCUMENT NUMBER: 80:97596
TITLE: Sorption material for removing metals from aqueous solutions
INVENTOR(S): Ziegler, Max
PATENT ASSIGNEE(S): Riedel-de Haen A.-G.
SOURCE: Ger. Offen., 23 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

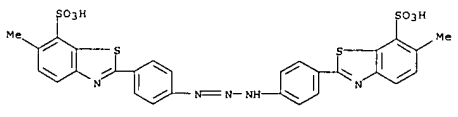
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2213381	A1	19731004	DE 1972-2213381	19720320
DE 2213381	B2	19760429		
DE 2213381	C3	19761216		
IT 981461	A	19741010	IT 1973-21775	19730316
FR 2176859	A1	19731102	FR 1973-9701	19730319
GB 1392023	A	19750423	GB 1973-13053	19730319
CH 596240	A	19780315	CH 1973-4040	19730320

PRIORITY APPLN. INFO.: DE 1972-2213381 19720320

AB The title material with high specificity and reproducibility was prepd. by
treatment of DEAE-cellulose [9013-34-7] or TEAE-cellulose (I) [9083-71-0] with Tiron [149-45-1], Beryllon II [2-[(3,6-disodiosulfo-8-hydroxy-1-naphthyl)azo]-1, 8-dihydroxy-3,6-disodiosulfonaphthalene] [51053-00-0], Titan Yellow [**1829-00-1**], or ammonium chloride [12125-02-9]-carminic acid [476-39-1] mixt. Thus, 1.0 g I was mixed with 20 ml 0.1% Tiron at pH 6.2 (NH4OAc-HOAc buffer) several min which was stirred in water with cellulose powder to give a material that eliminated iron [7439-89-6] and fluoride [16984-48-8] in water contg. 0.6-6ppm Fe and
.leq.9000 ppm F in the form of hexafluroferrate (III) ions.

IT **1829-00-1**
RL: USES (Uses)
(cellulose aminoethyl ethers modified by, for sp. adsorption of metals)

RN 1829-00-1 CAPLUS
CN 7-Benzothiazolesulfonic acid, 2,2'-(1-triazene-1,3-diyldi-4,1-phenylene)bis[6-methyl-, disodium salt (9CI) (CA INDEX NAME)



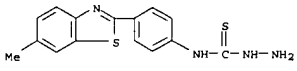
●2 Na

L10 ANSWER 72 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1972:572219 CAPLUS
DOCUMENT NUMBER: 77:172219
TITLE: Chromatography of metal **chelates**. IV. Analytical application of 4,4-diphenylthiosemicarbazones of 1,2-diketones
AUTHOR(S): Niederschulte, U.; Ballschmiter, K.
CORPORATE SOURCE: Inst. Anorg. Chem. Kernchem., Univ. Mainz, Mainz, Ger.
SOURCE: Fresenius' Z. Anal. Chem. (1972), 261(3), 191-7
CODEN: ZACFAU
DOCUMENT TYPE: Journal
LANGUAGE: German

AB The formation of colored **chelates** between the metals of the 1st and 2nd subgroup, Co, Ni, Mn, Bi, and Pb and R2NHCSNHN:CR1CR1:NNHCSNHR2 (R1 = H, Me; R2 = cyclohexyl, Ph, C6H4NO2-p, C6H4CF3-m, C6H3-(CF3)2-3,5, 1-naphthyl) was studied. The **chelates** can be used for the photometric detn. of the metals in the ppm range (molar absorptivity 1.0-2.3 .times. 104) after extn. with EtOAc contg. 5% pyridine. The effect of variation of the phenyl substituent on the absorptivity of the Cu, Hg(II), Pb, and Zn **chelates** and their sepn. by thin-layer chromatog. on Al2O3 with EtOAc as solvent was investigated.

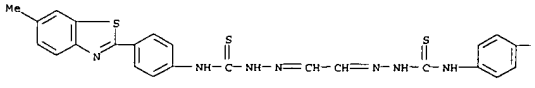
IT **38901-34-7 38901-45-0 38901-46-1**
38985-69-2
RL: ANST (Analytical study)
(in detn. of transition metals, spectrophotometric)

RN 38901-34-7 CAPLUS
CN Hydrazinecarbothioamide, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

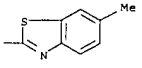


RN 38901-45-0 CAPLUS
CN Hydrazinecarbothioamide, 2,2'-(1,2-ethanediylidene)bis[N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

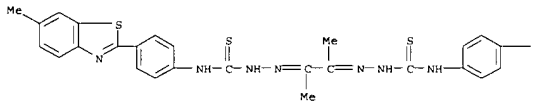


PAGE 1-B

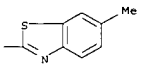


L10 ANSWER 72 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 38901-46-1 CAPLUS
CN Hydrazinecarbothioamide, 2,2'-(1,2-dimethyl-1,2-ethanediylidene)bis[N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

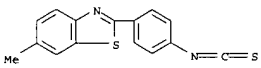
PAGE 1-A



PAGE 1-B



RN 38985-69-2 CAPLUS
CN Benzothiazole, 2-(4-isothiocyanatophenyl)-6-methyl- (9CI) (CA INDEX NAME)



L10 ANSWER 73 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1970:422068 CAPLUS
DOCUMENT NUMBER: 73:22068
TITLE: Reaction between some dyes and synthetic hydroxyapatite. 2. Nature of the binding reaction
AUTHOR(S): Speirs, R. L.
CORPORATE SOURCE: Med. Coll., London Hosp., London, Engl.
SOURCE: Histochem. J. (1970), 2(1), 67-86
CODEN: HISJAE
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In order to study the reactions involved in some of the histochem. procedures used for demonstrating Ca in calcified tissues, it was considered appropriate to use well characterized synthetic hydroxyapatite.
Satn. of surface sites was achieved in the adsorption of some dyes and the nature of these sites was investigated by studying (1) competition among several dyes for the surface, (2) the accessibility of surface Ca and P in stained and unstained hydroxyapatite, and (3) the release of 32P from surface-labeled hydroxyapatite during dye adsorption. Most of the dyes adsorbed from 95% ethanol were displaced relatively easily by treatment with 0.5 mM phosphate in ethanol, but those adsorbed from Tris buffer, pH 7.45, were more stable when exposed to phosphate in Tris. Treatment of stained hydroxyapatite with solvents contg. 0.5 mM Ca reduced the rate of elution of the dyes. Convincing evidence for **chelation**, H bonding, ion exchange, and phys. adsorption processes as the mechanisms of adsorption was not obtained.
IT **28903-27-7**
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(adsorption of, by hydroxylapatite, calcium and phosphate in relation to)
RN 28903-27-7 CAPLUS

L10 ANSWER 74 OF 74 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1967:7123 CAPLUS
DOCUMENT NUMBER: 66:7123
TITLE: Supersensitized zinc oxide
INVENTOR(S): Clausen, Ralph L.; Meyer, Donald K.
PATENT ASSIGNEE(S): Minnesota Mining and Manufg. Co.
SOURCE: U.S.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

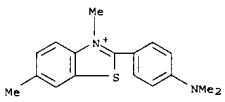
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3712144		19660906	US	19611211

AB A method is described for the prepn. of supersensitized ZnO and its use as a photoconductor in the prepn. of improved photoconductor sheets for use in the visible region. Sensitization of ZnO is accomplished when the ZnO surface contains, in addn. to a sensitizing dye, a colorless complex of Zn2+ and a complexing agent such as 2-(4-dimethylaminophenyl)-3,6-dimethylbenzothiazolium chloride. E.g., a ZnO dispersion was made by mixing a butadiene-styrene binder (1680 g. of a 30% by wt. toluene soln. of a copolymer consisting of 30 parts by wt. butadiene and 70 parts by wt. styrene), toluene (1104 g.), and ZnO USP-12 (1915 g.) for 0.5 hr. in a 1-gal. Waring Blendor at 107.degree.F. After standing, the dispersion was filtered through coarsesintered glass filters. The ZnO dispersion (200 g.) was added to vessels contg. varying amts. of sensitizing dyes. Coatings (1.5 mil dry thickness) of the sensitized dispersions in the vessels were placed on Al foil. After storing the vessels in the dark for 24 hrs., a 2nd set of photoconductor sheets was prepd. by coating the dispersion again on Al foil. Color prints were made with a spectrograph at a 4 sec. exposure to the light source followed by a 10 sec. development at 30 v., with the application of the plating current. The areas of sensitivity of the photoconductor as evidenced by image development in the sensitized areas were shown to be significantly greater on those sheets treated with dispersion prepd. with the **chelating** agent.
IT **10274-23-4 13018-00-3 15637-36-2**
RL: USES (Uses)
(zinc oxide photoconductor supersensitization by)
RN 10274-23-4 CAPLUS
CN Benzothiazolium, 2-[p-(dimethylamino)phenyl]-3,6-dimethyl-, p-toluenesulfonate (8CI) (CA INDEX NAME)

CM 1

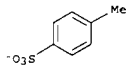
CRN 20096-11-1
CMF C17 H19 N2 S

L10 ANSWER 74 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



CM 2

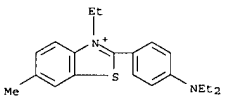
CRN 16722-51-3
CMF C7 H7 O3 S



RN 13018-00-3 CAPLUS
CN Benzothiazolium, 2-[p-(diethylamino)phenyl]-3-ethyl-6-methyl-, p-toluenesulfonate (8CI) (CA INDEX NAME)

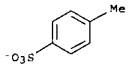
CM 1

CRN 47290-32-4
CMF C20 H25 N2 S



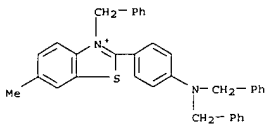
CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



RN 15637-36-2 CAPLUS
CN Benzothiazolium, 3-benzyl-2-[p-(dibenzylamino)phenyl]-6-methyl-, bromide (8CI) (CA INDEX NAME)

L10 ANSWER 74 OF 74 CAPLUS COPYRIGHT 2002 ACS (Continued)



● Br

L8 ANSWER 20 OF 26 USPATFULL

ACCESSION NUMBER: 1999:92643 USPATFULL

TITLE: Compositions and methods for stimulating **amyloid** removal in **amyloidogenic** diseases using advanced glycosylation endproducts

INVENTOR(S): Vitek, Michael P., East Norwich, NY, United States
Cerami, Anthony, Shelter Island, NY, United States
Bucala, Richard J., New York, NY, United States
Ulrich, Peter C., Old Tappan, NJ, United States
Vlassara, Helen, Shelter Island, NJ, United States
Zhang, Xini, Jericho, NJ, United States

PATENT ASSIGNEE(S): The Picower Institute For Medical Research, Manhasset, NY, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5935927		19990810	
	WO 9520979		19950810	
APPLICATION INFO.:	US 1996-501127		19960810	(8)
	WO 1995-US1380		19950202	
			19960810	PCT 371 date
			19960810	PCT 102(e) date

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-311768, filed on 23 Sep 1994, now abandoned which is a continuation-in-part of Ser. No. US 1994-191579, filed on 3 Feb 1994, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Duffy, Patricia A.
LEGAL REPRESENTATIVE: Klauber & Jackson
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 8 Drawing Page(s)
LINE COUNT: 2154

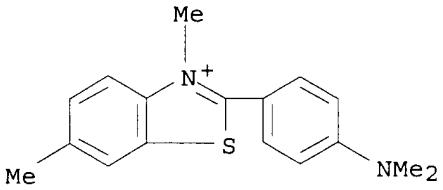
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates generally to methods and compositions for treating **amyloidogenic** diseases such as Alzheimer's disease and the development of type II diabetes, in which deposition of **amyloid** in organs such as the brain and pancreas interfere with neurological function and insulin release, respectively. The methods and compositions are directed toward increasing the activity of scavenger cells within the body at recognizing and removing **amyloid** deposits from affected tissues and organs. Scavenger cells may be targeted to **amyloid** deposits by means of spontaneously-occurring chemical modifications called advanced glycosylation endproducts (AGEs). Compositions are described which increase scavenger cell activity towards AGE-modified **amyloid**. **Amyloid** removal may also be enhanced by increasing AGE levels in **amyloid** deposits within the body by administering AGE-modified **amyloid** targeting agents, which after becoming situated at sites containing **amyloid**, subsequently attract scavenger cells to degrade attendant **amyloid**. These methods and associated compositions result in a decrease in the extent of **amyloid** deposits in tissues, reducing the attendant pathology.

IT **2390-54-7D**, Thioflavin, advanced glycosylation end-product conjugates **169553-19-9 169553-21-3**
(advanced glycosylation end-products for amyloid removal stimulation in amyloidogenic diseases)

RN 2390-54-7 USPATFULL

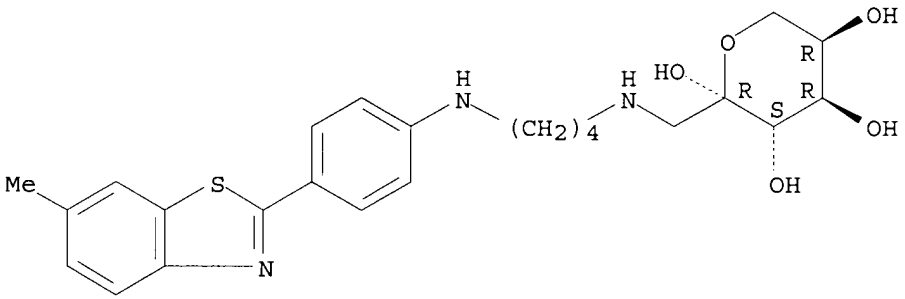
CN Benzothiazolium, 2-[4-(dimethylamino)phenyl]-3,6-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl^-

RN 169553-19-9 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

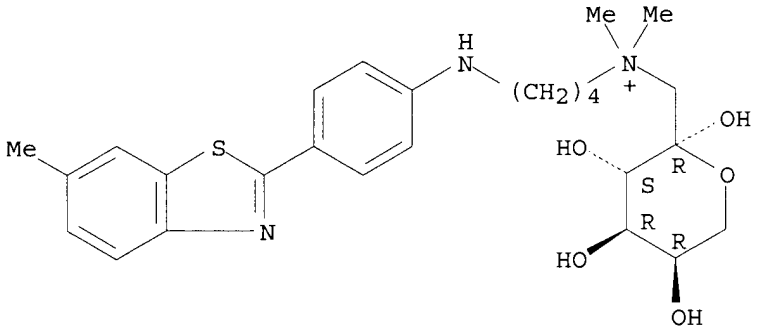
Absolute stereochemistry.



● HCl

RN 169553-21-3 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[dimethyl[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]ammonio]-, chloride (9CI) (CA INDEX NAME)

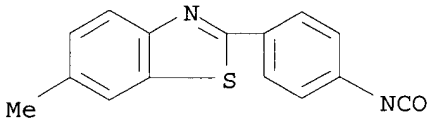
Absolute stereochemistry.



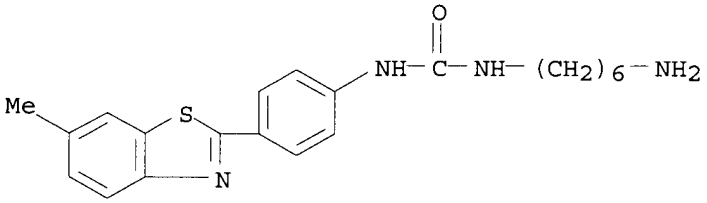
● Cl^-

IT **67229-93-0P 169553-13-3P 169553-14-4P**
169553-16-6P 169553-17-7P 169553-18-8P
169553-20-2P
(prepn. and reaction; advanced glycosylation end-products for amyloid removal stimulation in amyloidogenic diseases)

RN 67229-93-0 USPATFULL
CN Benzothiazole, 2-(4-isocyanatophenyl)-6-methyl- (9CI) (CA INDEX NAME)

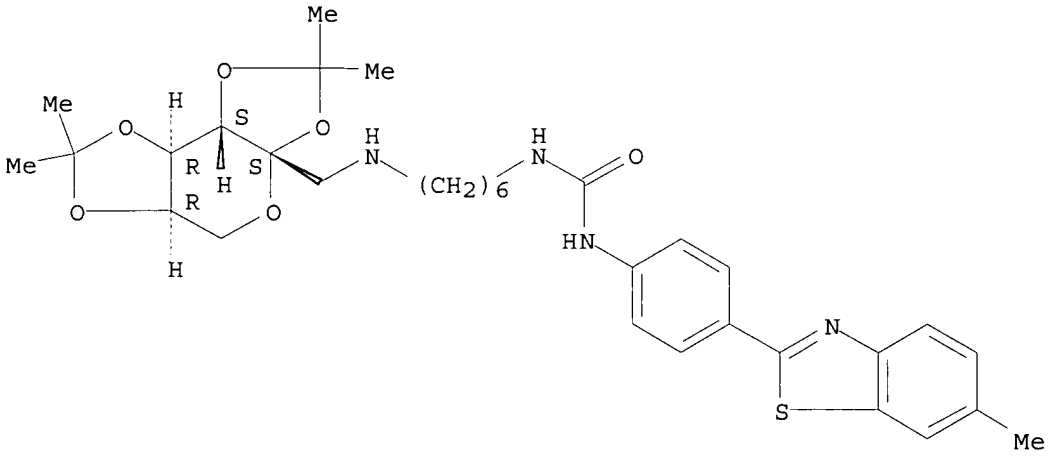


RN 169553-13-3 USPATFULL
CN Urea, N-(6-aminohexyl)-N'-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

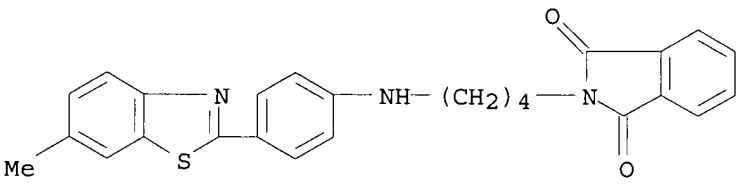


RN 169553-14-4 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[6-[[[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]carbonyl]amino]hexyl]amino]-2,3:4,5-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

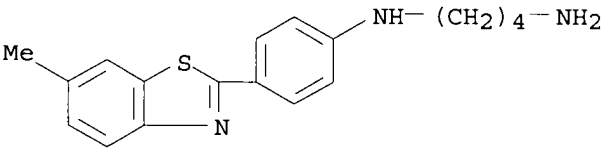
Absolute stereochemistry.



RN 169553-16-6 USPATFULL
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]- (9CI) (CA INDEX NAME)

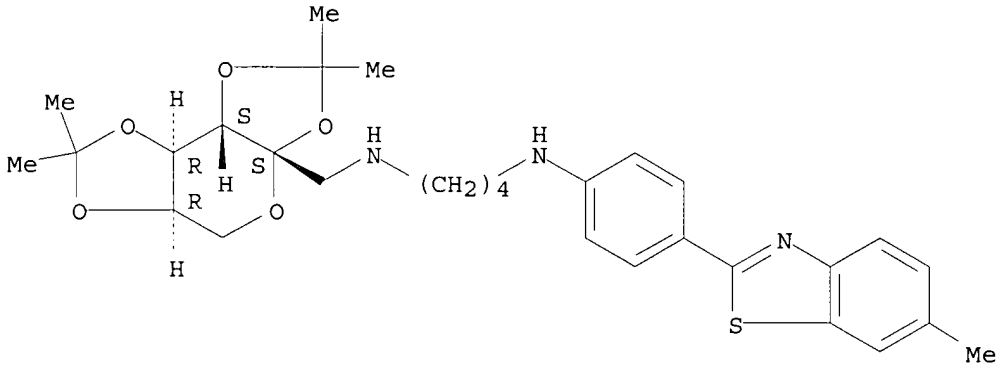


RN 169553-17-7 USPATFULL
CN 1,4-Butanediamine, N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)



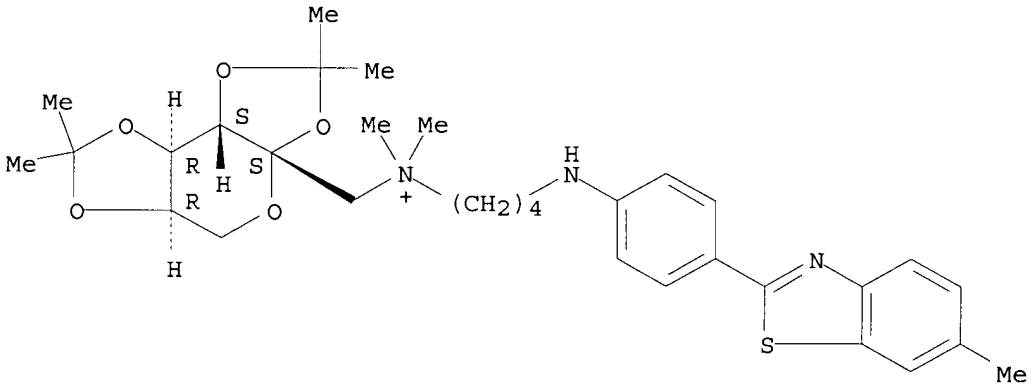
RN 169553-18-8 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]amino]-2,3:4,5-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



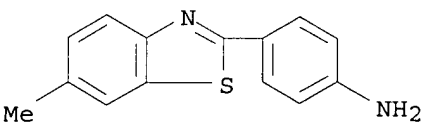
RN 169553-20-2 USPATFULL
CN .beta.-D-Fructopyranose, 1-deoxy-1-[dimethyl[4-[[4-(6-methyl-2-benzothiazolyl)phenyl]amino]butyl]ammonio]-2,3:4,5-bis-O-(1-methylethylidene)-, iodide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● I^-

IT **92-36-4**, 2-(4-Aminophenyl)-6-methylbenzothiazole
(reaction; advanced glycosylation end-products for amyloid removal stimulation in amyloidogenic diseases)
RN 92-36-4 USPATFULL
CN Benzenamine, 4-(6-methyl-2-benzothiazolyl)- (9CI) (CA INDEX NAME)



this structure

EXPA1